

DHCD – Division of Building and Fire Regulation
2006 Code Change Cycle

COMPILATION DOCUMENT
(of all code changes received with staff evaluations)

PART I

Code changes beginning with a “C” are to the Virginia Construction Code; with an “M” are to the Virginia Maintenance Code; with an “F” are to the Virginia Statewide Fire Prevention Code; with an “I” are to the Virginia Industrialized Building Safety Regulations; with an “A” are to the Virginia Amusement Device Regulations, and with a “CS” are to the Virginia Certifications Standards. The order is as follows: C – M – F – I – A – CS.

PART I contains page numbers 1 – 99 and code changes C-103.1 – C-310.6(R408.1)
PART II contains page numbers 100 – 199 and code changes C-310.6(R602.3) – C-408.8
PART III contains page numbers 200 – 303 and code changes C-503 – C-2803.1(M701.1)
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PART V contains page numbers 409 – 502 and code changes C-3501.1-d – F110.1
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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-103.2**

Nature of Change: (text is on code change form)

Change the grandfathering period for permit applicants to use the existing code when the new code becomes effective from one year to 90 days.

Proponent: City of Roanoke

Staff Comments:

The one year grandfathering provision was clearly established in the 2000 Code Change Cycle as a consensus change involving the Virginia building official's association and the Virginia homebuilders. This code change did not receive consensus support through the workgroup process utilized in this code change cycle.

Codes and Standards Committee Action:

_____ Approve as presented.

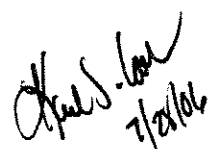
_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM
(Use this form to submit changes to building and fire codes)

Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us		Document No. <u>C-103.2</u> Committee Action: _____ BHCD Action: _____
Submitted by: <u>Karl S. Cooler</u> Representing: <u>City of Roanoke</u> Address: <u>215 Church Avenue, SW, Room 170</u> Phone No.: <u>540-853-1144</u> Regulation Title: <u>When applicable to new construction</u> Section No(s): <u>USBC 103.2</u>		
Proposed Change: Change Section 103.2 to read: 103.2 When applicable to new construction. Construction for which a permit application is submitted to the local building department after November 16, 2005 (date of adoption), shall comply with the provisions of this code, except for permit applications submitted during a one-year <u>ninety-day (90)</u> period after November 16, 2005 (date of adoption). The applicant for a permit during such one-year <u>ninety-day (90)</u> period shall be permitted to choose whether to comply with the provisions of this code or the provisions of the code in effect immediately prior to November 16, 2005 (date of adoption). <u>After this ninety-day period has expired and upon written application by an owner or an owner's agent, the building official may approve a modification as indicated in Section 106.3 of the code to allow the permit application to comply with the provisions of the code in effect immediately prior to (date of adoption).</u> This provision shall also apply to subsequent amendments to this code based on the effective date of such amendments. In addition, when a permit has been properly issued under a previous edition of this code, this code shall not require changes to the approved construction documents, design or construction of such a building or structure, provided the permit has not been suspended or revoked.		
Supporting Statement: The current provisions would allow a project to be submitted, reviewed, issued and inspected under a code that could possibly be nearly ten years old at the time of occupancy. Example: Submit November 15, 2006 under 2000 IBC Approved after review January 2007 Issued February 2007 Build Time 2-1/2 years Certificate of Occupancy issued August 2009  7/25/06		

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-103.3**

Nature of Change: (text is on code change form)

To add electrical wiring to the list of construction aspects triggering a change of occupancy.

Proponent: Virginia Chapter of the International Association of Electrical Inspectors (IAEI)

Staff Comments:

Currently the USBC prohibits changing the occupancy of a building if the new occupancy requires greater degrees of structural strength, fire protection, means of egress, ventilation or sanitation. The provision has been in the USBC since the 1987 edition. This code change proposal was considered by Workgroup 2 and the discussions centered around the fact that the change of occupancy provisions only address the major areas of building construction and do not address many other areas. Concerns were also raised that adding this language would trigger whole-scale rewiring of buildings undergoing a change of occupancy, such as having to replace aluminum wiring. The proponent was willing to change the language to “electrical system,” but the workgroup participants did not think that alleviated the concerns.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us</p>	<p>5/2/07</p>	<p>Document No. <u>C-103.3</u></p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: David G. Humphrey Representing: Virginia Chapter I.A.E.I.</p> <p>Address: 1001 Cedar Crossing Terrace Midlothian VA. 23114 Phone No.: 804-501-4365</p> <p>Regulation Title: Virginia Uniform Statewide Building Code Part I Section No(s): 103.3 Change of occupancy.</p>		
<p>Proposed Change: No change shall be made in the existing occupancy classification of any structure when the current USBC requires a greater degree of structural strength, fire protection, <u>electrical wiring</u>, means of egress, ventilation or sanitation. When such a degree is required, the owner or the owner's agent shall make written application to the local building department for a new certificate of occupancy and shall obtain the new certificate of occupancy prior to the use of the structure under the new occupancy classification. When impractical to achieve compliance with this code for the new occupancy classification, the building official shall consider modifications upon application and as provided for in section 106.3.</p>		
<p>Supporting Statement: The addition of <u>electrical wiring</u> addresses wiring changes that may be necessary and essential to electrical safety. A common practice of changing occupancy to an occupancy that requires special wiring methods and/or equipment is becoming increasingly common. <i>Example:</i> An M use group retail shop that may change to a B use group medical office providing patient care services in designated medical exam rooms is very common. This change by incorporating <u>electrical wiring</u> into the existing list, would make it clear that conformance with the electrical code requirements for special wiring and grounding in the exams rooms is not only essential to patient safety it is required by this code.</p>		

Hodge, Vernon

From: Humphrey, David [hum@co.henrico.va.us]
Sent: Wednesday, May 02, 2007 12:15 PM
To: Hodge, Vernon
Subject: RE: Received Code Change Proposal from IAEI

Good Afternoon Vernon,

I looked for language that seemed to encompass the concept. My thought is the term "*electrical wiring*" is a general term that would encompass the equipment, boxes, luminaires, etc, necessary to comply with the respective NEC article or section involved. *Electrical Wiring & Equipment* or *Electrical System* will work and I have no objection if one of these alternate terms is used.

Thank You for the input and suggestion.

David G. Humphrey
 Electrical Engineer II
 County of Henrico VA.

-----Original Message-----

From: Hodge, Vernon [mailto:Vernon.Hodge@dhcd.virginia.gov]
Sent: Wednesday, May 02, 2007 10:51 AM
To: Humphrey, David
Cc: Eubank, Paula
Subject: FW: Received Code Change Proposal from IAEI

David, thanks for the submittal of the code change. Emory asked me to forward his comments to you.

Vernon

From: Rodgers, Emory
Sent: Wednesday, May 02, 2007 9:16 AM
To: Hodge, Vernon; Eubank, Paula
Cc: Altizer, Ed; McIver, Curtis; John.Catlett@alexandriava.gov; Arthur E. Berkley
Subject: RE: Received Code Change Proposal from IAEI

This would fall into Work Group 2. Reading Dave's supporting statement just wonder if "electrical wiring" is too narrow? Would "electrical system" be a broader more inclusive term as he mentions equipment that maybe beyond term used? Vernon just forward this to Dave for thoughts.

From: Hodge, Vernon
Sent: Wednesday, May 02, 2007 8:40 AM
To: Rodgers, Emory; Eubank, Paula
Cc: Altizer, Ed; McIver, Curtis
Subject: Received Code Change Proposal from IAEI

Attached. Will put this with Workgroup 2. Hopefully the VBCOA Administrative Provisions Committee (Catlett/Berkley) proposal for change of occupancy will encompass this change.

5/2/2007

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-103.5**

Nature of Change: (text is on code change form)

To clarify existing language for reconstruction, alterations and repairs and to add an exception which would require reconstructed decks to meet current structural requirements.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

The VBCOA Administrative Provisions Committee proposes this change after much discussion by their committee members. The proposal was considered at the last Workgroup 2 meeting (July 26, 2007) in slightly different form and was determined to be moved forward as a consensus change. The committee then made minor changes as a result of discussions and submitted the final change.

Staff does not have any concerns with the language or its placement in the code from an editorial perspective, except perhaps the use of three “ors” in condition #1. Grammatically, it probably should be rewritten as:

“1. Any reconstruction, alteration or repair shall not adversely affect the performance of the building or structure, cause the building or structure to become unsafe or lower existing levels of health and safety.”

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

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Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us	<div style="font-size: 2em; font-family: cursive;">7/30/07</div>	Document No. <u>C-103.5</u> Committee Action: _____ BHCD Action: _____
Submitted by: <u>John Catlett</u> Representing: <u>VBCOA</u> Address: <u>401 Lafayette Street, Williamsburg VA 23185</u> Phone No.: <u>(757) 220-6135</u> Regulation Title: <u>Virginia New Construction Code</u> Section No(s): <u>103.5 (Option 1)</u>		
<p>Proposed Change:</p> <p>103.5 Reconstruction, alteration or repair. The following criteria is applicable to reconstruction, alteration or repair of buildings or structures: provided the</p> <p><u>1. Any</u> reconstruction, alteration or repair does <u>shall</u> not adversely affect the performance of the building or structure, or cause the building or structure to become unsafe or lower existing levels of health and safety.</p> <p>1. <u>2.</u> Parts of the building or structure not being reconstructed, altered or repaired shall not be required to comply with the requirements of this code applicable to newly constructed buildings or structures.</p> <p>2. <u>3.</u> The installation of material or equipment, or both, that is neither required nor prohibited shall only be required to comply with the provisions of this code relating to the safe installation of such material or equipment.</p> <p>3. <u>4.</u> Material or equipment, or both, may be replaced in the same location with material or equipment of a similar kind or capacity.</p> <p>Exceptions:</p> <p><u>1.</u> This section shall not be construed to permit noncompliance with any applicable flood load or flood-resistant construction requirements of this code.</p> <p><u>2. <i>Reconstructed decks, balconies, porches and similar structures located 30 inches or more above grade shall meet the current code provisions for structural loading capacity, connections and structural attachment. This requirement excludes handrails and guardrails.</i></u></p>		
<p>Supporting Statement:</p> <p>The new text will allow the code official to require that when a deck is replaced/reconstructed, it will structurally meet the most current code requirements. This code change does not require changes to guardrails or handrails. Additionally this section has been editorially reformatted.</p>		

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction and Maintenance Codes and the Virginia Amusement
Device Regulations
Code Change No. C-105.1.4-a**

Nature of Change: (text is on code change form)

To implement continuing education requirements for enforcement personnel under the USBC Construction and Maintenance Codes and the Amusement Device Regulations.

Proponent: DHCD Staff

Staff Comments:

In cooperation with the Building Code Academy Advisory Committee (BCAAC), this proposal would implement 16 hours of continuing education every two years for enforcement personnel to maintain the certificates of competence issued by the Board of Housing and Community Development. The codes already requires continuing education by attending the periodic code update classes provided near the end of each code update cycle. This next step would raise the level of professionalism of certificate holders by accepting ongoing training and educational classes in building and fire code related fields as a prerequisite for maintaining certificates.

This proposal and an alternative proposal (Code Change No. C-105.1.4-b, which is behind this proposal) was reviewed by Workgroup 2 at several meetings and by BCAAC and this proposal was moved forward as the consensus proposal.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

Address to submit to: DHCD, The Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.virginia.gov		Document No. <u>C-105.1.4-a</u> Committee Action: _____ BHCD Action: _____
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Submitted by: Staff, Technical Assistance Services Office, DHCD

Regulation: USBC, VADR Sections: USBC Part I (105), Part II (104), VADR (13 VAC 5-31-50)

Proposed Change:

Change USBC, Virginia Construction Code, Sections 105.1.4 and 105.2.3 to read as follows:

105.1.4 Continuing education requirements. Building officials shall attend 16 hours every two years of continuing education and periodic training courses ~~designated~~ approved or required by DHCD.

105.2.3 Continuing education requirements. Technical assistants shall attend 16 hours every two years of continuing education and periodic training courses ~~designated~~ approved or required by DHCD.

Change USBC, Virginia Maintenance Code, Section 104.4.4 to read as follows:

104.4.4 Continuing education requirements. Code officials and technical assistants shall attend 16 hours every two years of continuing education and periodic training courses ~~designated~~ approved or required by DHCD.

Change VADR Section 13 VAC 5-31-50 to read as follows:

13 VAC 5-31-50. Certification of amusement device inspectors.

A. (no change)

B. Local building department personnel enforcing this chapter and private inspectors shall attend 16 hours every two years of continuing education and periodic training courses as ~~designated and~~ approved or required by DHCD.

Supporting Statement:

This change implements minimum continuing education requirements for those certificate holders required to be certified by the USBC and the VADR in addition to the required attendance of periodic training courses previously required. This change is supported by the Building Code Academy Advisory Committee (BCAAC).

(Use this form to submit changes to building and fire codes)

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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-106.2**

Nature of Change: (text is on code change form)

To clarify that the USBC does not authorize local governments to implement building regulations.

Proponent: State Building Code Technical Review Board (Review Board)

Staff Comments:

This recommendation by the Review Board stems from an appeal case which is still in the court system. The delegation of authority provision of the USBC (Section 106.2) has been in the USBC since the 1981 edition, however, staff is not aware of it ever being used to authorize a local government to rewrite the USBC. In the appeal case, a local government relied upon this provision to dictate a third party inspection policy rather than permitting the building official to establish one, as the USBC requires. The code change makes it clear that there are legitimate limitations to a building official's delegation of authority, but that the provision cannot be used to circumvent other provisions of the USBC.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

Address to submit to:

DHCD, The Jackson Center
501 North Second Street
Richmond, VA 23219-1321

Tel. No. (804) 371 – 7150
Fax No. (804) 371 – 7092
Email: bhcd@dhcd.virginia.gov

Document No. C-106.2

Committee Action: _____

BHCD Action: _____

Submitted by: State Building Code Technical Review Board

Address: _____ Phone No. _____

Regulation Title: USBC, Virginia Construction Code Section No(s): 106.2

Date Submitted: July 30, 2007

Proposed Change:

Change Section 106.2 to read:

106.2 Delegation of authority. The building official may delegate powers and duties except where such authority is limited by the local government. However, such limitations of authority by the local government shall not be permitted to have the effect of altering the provisions of this code or creating building regulations. When such delegations are made, the building official shall be responsible for assuring that they are carried out in accordance with the provisions of this code.

Supporting Statement:

This clarification is needed to give guidance to local governments when limiting the delegation of powers and duties by the building official to legitimate interests of the local government, such as the number of technical assistants employed by the building department, the salaries of such assistants and other matters relating to internal human resources types of issues, as well as decisions such as whether to have agreements with other local governments to provide services. As currently written, the provision can be misconstrued to enable a local government to change the provisions of the USBC or to supersede policies of a building official relative to third party inspector approval, expedited plan review, minimum inspections, approval of permits, modifications and many other functions of the building official addressed in other sections of the USBC.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-107.2**

Nature of Change: (text is on code change form)

To raise the fee levy to support programs of the Virginia Building Code Academy from 1.75% to 2% effective July 1, 2009.

Proponent: DHCD Staff

Staff Comments:

As this is a staff proposal, the supporting statement contains the justification. The proposal was considered by Workgroup 2 and no opposition was raised, however, it was not placed in the consent package as staff was still working on the supporting statement and justification and wanted to give the client groups every opportunity to respond with any concerns.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

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501 North Second Street
Richmond, VA 23219-1321

Tel. No. (804) 371 – 7150
Fax No. (804) 371 – 7092
Email: bhcd@dhcd.virginia.gov

Document No. C-107.2

Committee Action: _____

BHCD Action: _____

Submitted by: DHCD, Technical Assistance Services Office Representing: _____

Address: _____ Phone No. _____

Regulation Title: 2006 USBC Construction Code Section No(s): 107.2

Date: _____

Proposed Change:

107.2 Code academy fee levy. In accordance with subdivision 7 of § 36-137 of the Code of Virginia, the local building department shall collect a 1.75% levy of fees charged for building permits issued under this code and transmit it quarterly to DHCD to support training programs of the Virginia Building Code Academy. The foregoing levy shall remain effective until July 1, 2009, after which time the fee levy shall be increased to 2%. Localities that maintain individual or regional training academies accredited by DHCD shall retain such levy.

Supporting Statement:

As permitted by the Code of Virginia Section 37-137, and supported by the Building Code Academy Advisory Committee (BCAAC) DHCD recommends the maximum allowable assessment of 2.00% upon building permits issued statewide in support of its programs and services relative to the Jack. A. Proctor Virginia Building Code Academy (JPVBCA). Previously increased at .25% from 1.5% to 1.75% in the year 2000, the presently proposed increase of .25% from 1.75% to 2.00% would become effective July 1, 2009, accommodating preparation by local governments to implement revisions to the levy collection process.

The provision and maintenance of a high level of code training and certification programs, services, and delivery, in terms of both quality and quantity, the efforts to remain abreast of the code industry standards, and the endeavor of DHCD to best serve the steadily rising demands of the code enforcement personnel necessitate the quarter percent increase in levy. A number of new initiatives for the current and upcoming fiscal years will enable DHCD to accomplish this mission, as indicated by the following:

- Enhancement of technology equipment, systems, and software to support the training and certification programs, implementing and maintaining the required technology infrastructure;
- Enhancement of program functionality of current automated system to include public record access and review and electronic certification application;

- Development and implementation of automated system to include electronic accounting, billing, and payment transactions and the formulation of an associated periodic levy audit program;
- Establishment and implementation of mandated continuing education program requirements of 16 hours per two year period, the formulation of an associated periodic CEU audit program;
- Continuance of audit of existing certification programs to ensure the timely and proper certification and activity status of code enforcement personnel;
- Expansion of academy training schedule and regional locations to 48 offerings per calendar year;
- Development and enhancement of 2006 code change cycle training program and associated alternative media delivery methods;
- Development and implementation of advanced technical programs and courses of at least four courses over the next three fiscal years;
- Development and implementation of additional specialized training programs and courses to include existing building rehabilitation, residential plan review and inspection, elevator inspection, structural wall bracing, accessibility, sustainability/green building, energy conservation, and assistive regional course offerings such as permit technician and fire protection plan review and inspection;
- Development of advanced instructor programs and courses;
- Increase in course facilitation, evaluation, and implementation oversight;
- Development and implementation of technology based training materials and electronic delivery methods to include teleconferencing as well as web-cast and web-based interactive modes having pass/fail objectives.

Due to a downturn in residential construction activities, DHCD has experienced a decrease in annual revenue from the prior fiscal years of 2005 and 2006. However, an approximate average annual increase of 1.2% for program, service, and delivery cost to DHCD will result in an expected annual expenditure of \$1.4 million for the upcoming fiscal years of 2008 and 2009. Furthermore, an increase in direct and indirect personnel costs at approximately 20%, as projected over a four year period from 2008 to 2012, will be required to support the additional necessary FTE staff. Although resources are momentarily sufficient to operate the JPVBCA training and certification activities in accordance with BCAAC recommendations, the future program and long-term goals are dependent upon the planning and provision of adequately increased resources.

As noted above, DHCD has experienced a rise in cost associated with the administration and delivery of the JPVBCA training and certification programs over the previous years. In accordance with typical sound business practice, and abiding by a business plan that supports the program through future fluctuations in economy, notwithstanding the continual and increasing need and demand of code enforcement personnel, the levy increase to 2.00% would permit a stronger fiscal base to endure unforeseen occurrences and sustain a consistent level of programs and services. With an increase of .25% and an average annual expenditure of \$1.4 million, the JPVBCA would carryover an annual balance of approximately \$500,000, a minimum acceptable reserve to maintain the required training and certification operations.

The three year fiscal account of the JPVBCA relative to income and expenditure for the quarterly periods of FY 05 through FY 07 is detailed respectively in the two charts below:

FY	Quarter 1 7/1 – 9/30	Quarter 2 10/1 –12/31	Quarter 3 1/1 – 3/31	Quarter 4 4/1 – 6/30	FY Total Income
FY 2005	345,686.70	339,282.14	313,847.92	344,625.14	1,343,441.90
FY 2006	376,395.04	329,377.13	327,188.47	371,332.54	1,404,293.18
FY 2007	448,670.36	288,275.05	216,005.23	306,619.33	1,259,569.97
Total Income	1,170,752.10	956,934.32	857,041.62	1,022,577.01	4,007,305.05

FY	Quarter 1 7/1 – 9/30	Quarter 2 10/1 –12/31	Quarter 3 1/1 – 3/31	Quarter 4 4/1 – 6/30	FY Total Expenditure
FY 2005	169,850.26	230,429.04	198,274.14	274,773.72	873,327.16
FY 2006	175,478.86	258,106.42	308,837.06	373,517.68	1,115,940.02
FY 2007	216,655.32	252,474.35	302,409.14	438,741.08	1,210,279.89
Total Expenditure	561,984.44	741,009.81	809,520.34	1,087,032.48	3,199,547.07

In an anticipation of meeting the rise in demand and expense for these activities it is necessary to implement an increase to the levy fee from 1.75%, increased in 2000, to 2.00% to be effective January 1, 2009 (?). This would result in an approximate annual revenue increase of \$180,000.00 (based on the FY 07 levy revenue).

For comparative purposes, DHCD expended \$1,210,177 of its \$1,259,569 generated from the 1.75% levy fee collected for the purpose of operating the Jack Proctor Virginia Building Code Academy (JPVBCA) and its related training and certification activities conducted in fiscal year 2007. These activities included the following:

- Provision of ICC memberships for Building, Fire, and Property Maintenance Officials in each jurisdiction throughout the state;
- Initial development and rollout of the customer electronic registration and record management system;
- Procurement of additional and update of existing training technology, equipment, and materials;
- Revision and update of existing programs and courses;
- Development and implementation of new programs and courses;
- Development and implementation of a comprehensive instructor program;
- Expansion of academy offerings, including:
 - 2003 code change cycle training programs
 - 5 core programs
 - 5 advanced programs
 - 27 technical courses
 - 2 instructor programs
 - 4 specialized regional training events.

The operation of the JPVBCA and its related activities can be measured by both qualitative and quantitative means. Both the two year history and the two year projection of the program statistics and the per student product conveyed per fiscal year are detailed below:

FY	# of Persons Trained	# of Courses Offered Academy/Code Change Training	Average # of Persons per Course Core	Average # of Persons per Course Technical & Advanced	Average \$ per Course Core	Average \$ per Course Technical & Advanced	Average \$ per Person Core	Average \$ per Person Technical & Advanced
FY 2006	4703	32/81	59	32	\$21,396	\$11,396	\$369	\$369
FY 2007	1488	43	49	32	\$19,847	\$20,839	\$405	\$651
FY 2008 (anticipated)	5000	48/98	50	33	\$20,500	\$21,747	\$410	\$659
FY 2009 (anticipated)	1800	54	50	35	\$20,750	\$23,345	\$415	\$667

In anticipation of meeting the rise in demand and expense for these activities, it is necessary for DHCD to implement an increase to the levy fee from 1.75%, as increased in 2000, to 2.00%, as permitted by state law, to be effective July 01, 2009. Based upon the fiscal year 2007 levy revenue, this would result in an approximate annual revenue increase of \$180,000.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-108.1-a**

Nature of Change: (text is on code change form)

To clarify existing language under the permit exemption section.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

The VBCOA Administrative Provisions Committee proposes this change which will clarify the existing language for work which may be done without a permit. There are a few substantive changes to the existing language for fire-rated construction where the committee did not believe that work should be done without a permit. The proposal was considered at all of the Workgroup 2 meetings and changes were made to address discussions. There was agreement to consider this final version as a consensus change.

A similar, but somewhat more restrictive proposal from the City of Danville (Code Change No. C-108.1-b, found behind this change) was also considered by Workgroup 2. The VBCOA proposal was determined to be more in line with the existing language and was therefore recommended over the City of Danville proposal.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us</p>	<p>6/15/07</p>	<p>Document No. <u>C-108.1-a</u></p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: <u>Ron Clements</u> Representing: <u>VBCOA</u></p> <p>Address: <u>9800 Government Center Parkway</u> Phone No.: <u>(804) 751-4163</u></p> <p>Regulation Title: <u>Virginia New Construction Code</u> Section No(s): <u>108.2</u></p>		

4/16/07

Proposed Change:

108.1 When Applications are required: (108.1 text unchanged)

Alter # 1 as follows:

1. Construction or demolition of a building or structure, ~~including the installation or altering of any equipment regulated by the USBC. Installations or alterations involving: (i) the removal or addition of any wall, partition or portion thereof; (ii) any structural component; (iii) the repair or replacement of any required component of a fire or smoke rated assembly; (iv) the alteration of any required means of egress system; (v) water supply and distribution system, sanitary drainage system, or vent system; (vi) electric wiring; (vii) fire protection system, mechanical systems or fuel supply systems; (viii) any equipment regulated by the USBC.~~

Create a separate item for the last sentence of #1

2. For change of occupancy, application for a permit shall be made when a new certificate of occupancy is required per 103.3.

Existing items #2 and #3 re-number #3 and #4.

108.2 Exemptions from application for permit. Notwithstanding the requirements of Section 108.1, application for a permit and any related inspections shall not be required for the following; however, this section shall not be construed to exempt such activities from other applicable requirements of this code. In addition, when an owner or an owner's agent requests that a permit be issued for any of the following, then a permit shall be issued and any related inspections shall be required.

Items 1 through 7 are unchanged. Item # 9 regarding signs to be renumbered #8 and item #10 regarding LP gas containers to be renumbered #9. The stricken language from #10 below was edited and relocated to the new 108.1 #1 above.

10. ~~Ordinary repairs. Ordinary repairs that do not include including (i) the removal cutting away of any wall, partition or portion thereof; (ii) the removal or alteration of cutting of any structural beam or loadbearing support; (iii) the repair or replacement of any required component of a fire or smoke rated assembly; (iv) the removal or change alteration of any required means of egress system; (v) the rearrangement of parts of a structure affecting the egress requirements; (v) the addition to, alteration of, replacement of or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas or oil, soil, waste, vent water supply and distribution system, sanitary drainage system, or vent system or similar piping, electric wiring, fire protection system, mechanical system or fuel supply system work; or (vi) any other work affecting public health or general safety. However, Ordinary repairs Ordinary repairs that include, but are not limited to, the following:~~

DELETE THE CURRENT SUB-SECTIONS (8.1 through 8.3) TO ITEM #8 AND REPLACE WITH THE FOLLOWING:

- 10.1. Replacement of windows and doors, that are not required to be fire rated, in: group R-2 where serving a single dwelling unit, R-3, R-4, and R-5;
- 10.2. Replacement of plumbing fixtures, in all use groups, without alteration of water supply and distribution systems, sanitary drainage systems, or vent systems;
- 10.3. Replacement of general use snap switches, dimmer and control switches, 125 volt 15 and 20 ampere receptacles, Luminaires (Lighting Fixtures) and ceiling (paddle) fans in: group R-2 where serving a single dwelling unit, R-3, R-4, and R-5;
- 10.4. Replacement of mechanical appliances, provided such equipment is not fueled by gas or oil, in group R-2 where serving a single dwelling unit, R-3, R-4, and R-5;
- 10.5. Replacement of an unlimited amount of roof covering or siding in Group R-3, R-4 or R-5 occupancies provided the building or structure is not in an area where the design (3 second gust) wind speed is greater than 100 miles per hour (160 km/hr) and Replacement of 100 sq. ft. or less of roof covering in all use groups and all wind zones;
- 10.6. Replacement of 100 sq. ft. or less of roof decking in Group R-3, R-4 or R-5 occupancies unless the decking to be replaced was required at the time of original construction to be fire retardant treated or protected in some other way to form a fire rated wall termination;
- 10.7. Installation or replacement of floor finishes in all occupancies;
- 10.8. Replacement of class C interior wall or ceiling finishes installed in group A, E and I occupancies and replacement of all classes of interior wall or ceiling finishes installed in occupancies other than group A, E and I;
- 10.9. Installation or replacement of cabinetry or trim;
- 10.10. Application of paint or wallpaper;
- 10.11. Other repair work deemed by the code official to be minor and ordinary which does not adversely affect public health or general safety.

Supporting Statement:

Section #8 has been relocated to the end of the list and renumbered #10 in an attempt to keep the long list of ordinary repairs as the last item so that the current items #9 and #10 are easier to find.

Editorial changes:

The stricken language from 108.2 #10 below edited and relocated to the new 108.1 #1 above so that there are no longer exceptions to exceptions.

Section 10.0 replace the word "cutting" with "removal" and "alteration", divide the section into three sentences for clarity, replace "removal or change" with "alteration", condense the two items regarding means of egress into one item and clean up the wording, update the plumbing system terminology, removed "but not limited to" as a catch-all in the charging statement and placed it into the list as item # 10.11.

The creation of subsections .1 through .11 editorially is an attempt to take mix of ordinary repairs currently listed in three subsections and organize them into individual subject specific sub-sections such that they are easier to interpret and apply.

A number of terms were updated with more current terminology that is found in the model codes; some examples are: "water supply and distribution", "general use snap switches", "roof decking"

Technical changes:

10, Replacement or repair of fire and smoke rated assembly components was added to make it clear that any component that may otherwise be exempted by the following list as an ordinary repair does require a permit if the component is part of a rated assembly. The existing 2003 USBC language exempts all interior wall finish replacements. If the interior wall finish also forms part of a required fire rated assembly (Fire Wall, Fire Partition, Fire Barrier, Smoke barrier), then a permit should be secured and inspections conducted to make sure that the proper material is utilized and installed to maintain the fire resistive rating. Many times, required fire rated materials (rated gypsum wall board) is replaced with a non-rated material when it becomes damaged. Improper fasteners may used or not correctly spaced and through penetrations are not properly sealed. Common places where this occurs is in dwelling unit separations in apartments and townhouses, guest room separations in hotels, and in required fire rated corridors in all occupancies.

10.1, The existing residential exemptions for door and window replacements was changed to require permits when the doors are required to be fire rated; such as fire rated corridor and breezeway doors to R-2 dwellings or protected openings in R-3 or R-4.

10.3, This re-wording permits the replacement of dimmers and paddle fan speed controls which are not general use snap switches and are commonly installed by the property owner. Eliminating the word outlets from receptacles as the outlet includes the cable, box and device as defined in NEC article 100. Limiting replacement of receptacles to 125 volt 15 and 20 amperes limits replacement to simple devices instead of 50 ampere, or greater poly-phase outlets thus exposing the installer to higher voltages etc.

10.5, The roof covering exemption was expanded to allow up to 100 sf of roof repair or replacement regardless of the occupancy classification or wind zone.

10.6, The addition of this language is intended to clarify that roof sheathing is not the same as roof finish replacement. It is not uncommon to replace damaged or rotted sheathing as part of a roof replacement. However, the sheathing forms part of the structure and can be an important part of the building design. Many roof replacements at townhouses and other residential occupancies involve replacing deteriorated FRT plywood in a 4 foot area adjacent to fire walls between units. This practice has been used for many years to replace parapet fire walls. Typically, permits are not received and the material replaced with non FRT plywood. The resulting laps in the required fire preventive material can lead to the spread of fire between units. This still allows up to 100 sf of deck replacement without requiring a permit to allow for a limited amount of deck replacement in conjunction with a re-roofing job.

10.8, Interior wall finishes are regulated in Chapter 8 (Section 803) and in other areas of the code such as Section 411.8 for special amusement buildings. The flame spread and smoke development potential is a critical element in occupant safety, especially in areas with high occupant loads or where building occupants are incapable of self preservation. Interior finishes are frequently changed in restaurants, night clubs, museums and other places of public assembly. The code change adds a requirement that use groups A, E and I should not be exempted from permits (and ultimately inspections) to insure compliance unless they are allowed to be a type C finish.

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us</p>		<p>Document No. <u>C-108.1-b</u></p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: <u>Jerry Rigney</u> Representing: <u>City of Danville</u></p> <p>Address: <u>P.O. Box 3300, Danville, Virginia 24543</u> Phone No.: <u>434-799-5263</u></p> <p>Regulation Title: <u>Part 1 of the Virginia Uniform Statewide Building Code, The Virginia Construction Code (2003 Edition)</u> Section No(s): <u>108.2 Exemptions from application for permit. Sub section 8.1 and 8.2</u></p>		
<p>Proposed Change:</p> <p>8.1. Either within the dwelling unit in Group R-2 occupancies that are four stories or less in height or in Group R-3, R-4 and Group R-5 occupancies, or both, replacement of (i) either mechanical or plumbing equipment or appliances, or both, provide such equipment or appliances are not fueled by gas or oil; (ii) flooring coverings or porch flooring, or both; and (iii) windows and doors, electrical switches, electrical outlets, light fixtures or ceiling fans.</p> <p>(Omit)</p> <p>8.2 In Group R-3, R-4 or R-5 occupancies, replacement of either roof coverings, or siding or the installation of siding, or both, provided the buildings or structures are not subject to wind speeds greater than 100 miles per hour (160 km/hr), determined in accordance with applicable requirements of this code.</p>		
<p>Supporting Statement: In Virginia we have many concerns with the installation of siding and the replacement of roof coverings, and windows. Also, once these material have been installed, it is very costly to located the problems and then for the necessary repairs. If we could inspect these items during the installations, it helps protect the property owners from damage to the building or structure and ensure compliance of the code is achieved.</p>		

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-108.2-a**

Nature of Change: (text is on code change form)

To allow permit applications to be required when installing replacement siding, roofing and windows in buildings within historic districts.

Proponent: DHCD Staff

Staff Comments:

The proposal is based on legislation introduced in the 2007 General Assembly. A similar proposal from the City of Danville (Code Change No. C-108.2-b, found behind this proposal) was also submitted. The proposals were considered by Workgroup 2 and the staff proposal was revised based on discussions and was agreed to be moved forward as a consensus proposal.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

<p>Address to submit to:</p> <p>DHCD, The Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.virginia.gov</p>		<p>Document No. <u>C-108.2-a</u></p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
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Submitted by: DHCD Staff Representing: _____

Address: _____ Phone No. _____

Regulation Title: 2006 USBC – Virginia Construction Code Section No(s): 108.2

Proposed Change:

Add a new exception to Section 108.2 as follows:

Exception: Application for a permit may be required by the building official for the installation of replacement siding, roofing and windows in buildings within a historic district designated by a locality pursuant to Section 15.2-2306 of the Code of Virginia.

Supporting Statement:

This code change is in response to legislation introduced in the 2007 Session of the General Assembly. The legislation was tabled with the understanding that the Board of Housing and Community Development would consider amendments to the USBC to require permits when replacing siding, roofing and windows in historic districts. The draft language is consistent with the proposed legislation except that rather than the determination of whether to require a permit being made by the locality (which might require legislation), the requirement is at the option of the local building official.

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

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<p>Submitted by: <u>Jerry Rigney</u> Representing: <u>City of Danville</u></p> <p>Address: <u>P.O. Box 3300, Danville, Virginia 24543</u> Phone No.: <u>434-799-5263</u></p> <p>Regulation Title: <u>Part 1 of the Virginia Uniform Statewide Building Code, The Virginia Construction Code (2003 Edition)</u> Section No(s): <u>108.2 Exemptions from application for permit. Sub section 8.1 and 8.2</u></p>		
<p>Proposed Change:</p> <p>8.1. Either within the dwelling unit in Group R-2 occupancies that are four stories or less in height or in Group R-3, R-4 and Group R-5 occupancies, or both, replacement of (i) either mechanical or plumbing equipment or appliances, or both, provide such equipment or appliances are not fueled by gas or oil; (ii) flooring coverings or porch flooring, or both; and (iii) windows and doors <u>not located in an approved designated Historic District; and (iiii) electrical switches, electrical outlets, light fixtures or ceiling fans.</u></p> <p>8.2 In Group R-3, R-4 or R-5 occupancies, replacement of either roof coverings, or siding or the installation of siding, or both, provided the buildings or structures are not <u>located in an approved designed Historic District or</u> subject to wind speeds greater than 100 miles per hour (160 km/hr), determined in accordance with applicable requirements of this code.</p>		
<p>Supporting Statement: In Virginia we have many Historic Districts within our cities and counties that has special requirements concerning the installation of siding and the replacement of roof coverings. The permitting process would be an excellent method to have a check and balance system to verify compliance with other local and state regulations are met. We have also experienced many problems with the installation of siding and roofing and difficulty in locating the problems that occurred during the installation of these materials. Also, once these material have been installed, it is very costly to located the problems and then for the necessary repairs. If we could inspect these items during the installations, it helps protect the property owners from damage to the building or structure and ensure compliance of the code is achieved.</p>		

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-108.2(7)**

Nature of Change: (text is on code change form)

Require all swimming pools with 24 inches or more of water depth to obtain permits prior to installation.

Proponent: City of Roanoke

Staff Comments:

The current requirement for permits for swimming pools is based on consensus discussions during the 2000 Code Change Cycle and the language is based on an exemption in the International Building Code administrative provisions. Contrary to the supporting statement provided by the proponent, this change would actually be less restrictive than the current code, which requires three criteria to be met to be exempt from a permit, rather than only the depth requirement. In other words, both the current language and the proposed change would exempt pools with less than 24 inches of water depth; however, the proposed change would permit such a pool of any size to be exempt, while the current language also limits the size and gallon capacity of a pool that does not need a permit. This code change did not receive consensus support through the workgroup process utilized in this code change cycle.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

Address to submit to:

DHCD, the Jackson Center
501 North Second Street
Richmond, VA 23219-1321Tel. No. (804) 371 - 7150
Fax No. (804) 371 - 7092
Email: bhcd@dhcd.state.va.usDocument No. C-108.2(7)

Committee Action: _____

BHCD Action: _____

Submitted by: Karl S. Cooler Representing: City of RoanokeAddress: 215 Church Avenue, SW, Room 170 Phone No.: 540-853-1144Regulation Title: Exemptions from application for permit Section No(s): 108.2(7)

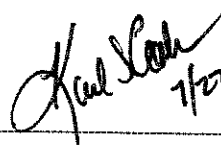
Proposed Change: Change USBC Section 108.2 (7) to read:

Prefabricated swimming pools that have a surface area not greater than 150 square feet (13.95 m^2), do not exceed 5,000 gallons (19 000 L) and are less than 24 inches (610 mm) deep.

Supporting Statement:

The use of small blow-up or temporary pools across the Commonwealth of Virginia and the nation has been the subject of many discussions among code officials. The current wording is not clear as to whether or not all conditions have to be met for a permit to be required or any one of them. Under the current language, none of the pools being sold would require a permit. This change would remove sometimes conflicting definitions offered by the International Building and International Residential Codes relating to definitions of swimming pools and the related barrier requirements.

Attachments:

2003 USBC Section 108.2(7)
2003 IBC Section 3109
2003 IRC Appendix G, Sections AG102 & AG105
Us Consumer Product Safety Commission Publication #362
7/27/2006

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-108.3**

Nature of Change: (text is on code change form)

To allow the submittal of permit applications through electronic submissions.

Proponent: DHCD Staff

Staff Comments:

The proposal is based on discussions with several localities and on advise from the agency's legal counsel. It was determined that while authority probably already exists for the submittal of permit applications electronically, the addition of specific language would be beneficial. Staff was asked to draft the change based on discussion at the first Workgroup 2 meeting and at the second Workgroup 2 meeting, the proposal was recommended to move forward as a consensus proposal.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

Address to submit to:		Document No. <u>C-108.3</u>
DHCD, The Jackson Center 501 North Second Street Richmond, VA 23219-1321		Committee Action: _____
Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.virginia.gov		BHCD Action: _____

Submitted by: Technical Assistance Services Office, Div. of Bldg. and Fire Regulation, DHCD

Regulation Title: USBC, Va. Const. Code Section No(s): 108.3

Proposed Change:

Change Section 108.3 to read as follows:

108.3 Applicant information, processing by mail. Application for a permit shall be made by the owner or lessee of the relevant property or the agent of either or by the RDP, contractor or subcontractor associated with the work or any of their agents. The full name and address of the owner, lessee and applicant shall be provided in the application. If the owner or lessee is a corporate body, when and to the extent determined necessary by the building official, the full name and address of the responsible officers shall also be provided.

A permit application may be submitted by mail and such permit applications shall be processed by mail, unless the permit applicant voluntarily chooses otherwise. In no case shall an applicant be required to appear in person.

The building official may accept applications for a permit through electronic submissions provided the information required by this section is obtained.

Supporting Statement:

While electronic submittal of permit applications are currently being utilized in some localities, this code change will eliminate any confusion concerning the existing language which may be read to prohibit such submittals and provide safeguards that all necessary information is submitted.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-110.1**

Nature of Change: (text is on code change form)

Add language to the permit application section which would require the building official to determine whether a permit application is related to violations under the Virginia Maintenance Code and, if so, to limit the approval of the permit application to encompass actions by the maintenance code official.

Proponent: City of Norfolk

Staff Comments:

While this proposal attempts to coordinate the Virginia Construction Code and the Virginia Maintenance Code, concerns were raised in the workgroup meetings about the overlapping authority this proposal would create. It was also recognized that a separate proposal (Code Change No. M-104.5.4), which clarifies that the time limits for correction of violations under the Virginia Maintenance Code are not affected by obtaining a permit under the Virginia Construction Code and was recommended to move forward as a consensus change, addresses some issues raised by this proposal. Therefore, this proposal did not receive consensus support through the workgroup process, however, it was recognized that there could be better coordination between the codes and the proponent and VBCOA's maintenance code committee were encouraged to work towards a future proposal.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

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<p>Submitted by: <u>___Lynn Underwood___</u> Representing: <u>___City of Norfolk</u></p> <p>Address: <u>___400 Granby, Norfolk, Va 23510___</u> Phone No.: (757) <u>664-6511___</u></p> <p>Regulation Title: <u>___Approval and issuance of permits. Section 110.1</u></p>		
<p>Proposed Change:</p> <p>110.1 Approval and issuance of permits. The building official shall examine or cause to be examined all applications for permits or amendments to such applications within a reasonable time after filing. If the applications or amendments do not comply with the provisions of this code or all pertinent laws and ordinances, the permit shall not be issued and the permit applicant shall be notified in writing of the reasons for not issuing the permit. <u>If the application or amendments are associated with a Notice of Violation or a Correction Notice according to the provisions of Section 105.4 of Part III of this code, approval is subject to lawful conditions set out by the Property Maintenance Official.</u> If the application complies with the applicable requirements of this code, a permit shall be issued as soon as practicable. The issuance of permits shall not be delayed in an effort to control the pace of construction of new detached one- or two-family dwellings.</p>		
<p>Supporting Statement:</p> <p>This proposed change in the 2006 IRC would link the issuance of any permit to any active property maintenance case. If a permit is required to meet conditions set out in a Correction Notice or Notice of Violation, this change would allow the Property Maintenance Official to review the proposal and withhold approval unless all conditions are met.</p>		

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-110.2**

Nature of Change: (text is on code change form)

To expand the allowance for annual permits.

Proponent: DHCD Staff

Staff Comments:

The proposal is implementing legislation passed by the 2007 General Assembly and matches the legislative language. As the legislation provided specific language, this change was approved as consensus at the April 9, 2007 stakeholder's meeting and did not need to be considered through the workgroup process.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

<p>Address to submit to:</p> <p>DHCD, The Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.virginia.gov</p>		<p>Document No. <u>C-110.2</u></p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
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Submitted by: DHCD Staff Representing: _____

Address: _____ Phone No. _____

Regulation Title: 2006 USBC – Virginia Construction Code Section No(s): 110.2

Proposed Change:

Change Section 110.2 to read as follows:

110.2 Types of permits. Separate or combined permits may be required for different areas of construction such as building construction, plumbing, electrical, and mechanical work, or for special construction as determined appropriate by the locality. In addition, permits for two or more buildings or structures on the same lot may be combined. Annual permits may also be issued for ~~alterations to an existing structure~~ for any construction regulated by this code. The annual permit holder shall maintain a detailed record of all ~~alterations made~~ construction under the annual permit. Such record shall be available to the building official and shall be submitted to the local building department if requested by the building official.

Supporting Statement:

This code change is in response to legislation approved in the 2007 Session of the General Assembly (Chapter 291 of the 2007 Acts of Assembly). The draft language is consistent with the legislation.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-110.6-a**

Nature of Change: (text is on code change form)

To establish a time limit for permits for single-family dwellings and strengthen the provisions for revocation of permits.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

A number of proposals were received concerning this issue, including a legislative proposal which was referred to the Board of Housing and Community Development. Through the work group process and consideration by VBCOA's Administrative Provisions and Property Maintenance Code Committees, the current proposal was recommended to move forward as consensus.

A similar proposal (Code Change No. C-110.6-b, found behind this change) was submitted near the end of the cutoff date for proposals and was not vetted through the workgroup process, but is included for consideration.

In addition, a proposal from the City of Newport News (Code Change No. 110.7, found behind this change) was submitted addressing revocation of permits and was considered by Workgroup 2 and was found to be encompassed by the final version of the consensus proposal.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

Address to submit to:

DHCD, the Jackson Center
501 North Second Street
Richmond, VA 23219-1321

Tel. No. (804) 371 – 7150
Fax No. (804) 371 – 7092
Email: bhcd@dhcd.state.va.us

8/3/07

Document No. C-110.6-a

Committee Action: _____

BHCD Action: _____

Submitted by: Ralston McInnis/Lynn Underwood Representing: VBCOA Property Maintenance Committee

Address: 400 Granby, Norfolk, Va 23510 Phone No.: (757) 664-6511

Regulation Title: Suspension of Permit, Section 110.6

~~110.6 Suspension of a permit~~ **Abandonment of Work.** Any ~~A~~ permit **Building Official** shall **be permitted to revoke a permit** ~~become invalid~~ if work on the site authorized by the permit is not commenced within six months after issuance of the permit or if the authorized work on the site is suspended or abandoned for a period of six months after the ~~permit is issued~~ **time of commencing the work**; however, permits issued for building equipment such as plumbing, electrical and mechanical work shall not **be revoked** ~~become invalid~~ if the building permit is still in effect. It shall be the responsibility of the permit applicant to prove to the building official that **authorized work includes substantive progress, characterized by approved inspections as specified in Section 113.3 of Part I of this code; at least one within a period of six months or other evidence that would indicate substantial work has been performed.** ~~work has not been suspended or abandoned.~~ Upon written request, the building official may grant one or more extensions of time, not to exceed one year per extension.

110.7 Single family dwelling permits. The building official shall be permitted to require a three year time limit to complete construction of new detached single family dwellings, additions to detached single family dwellings and residential accessory structures. The time limit shall begin from the issuance date of the permit. The building official may grant extensions of time if the applicant can demonstrate substantive progress in work as defined in section 110.6

110.7 8. Revocation of a permit. The building official may revoke a permit or approval issued under this code in the case of any false statement, misrepresentation of fact, **abandonment of work, failure to complete construction as required by section 110.7** or incorrect information supplied by the applicant in the application or construction documents on which the permit or approval was based.

(Re-number remaining sections)

Supporting Statement:

This proposed change would require substantive progress for work authorized by a permit. The term, "Substantive progress" is characterized as that progress that would necessitate successfully completing a regular inspection within the six-month period established to maintain the permit. In addition new section 110.7 will limit the length of time that an applicant has to complete a detached single family dwelling, addition or accessory structure For commercial permits, passing a routine inspection would satisfy the condition while not triggering the revocation of the permit.

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

Address to submit to: DHCD, The Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.virginia.gov	Document No. <u>C-110.6-b</u> Committee Action: _____ BHCD Action: _____
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Submitted by: Patricia Marx _____ Representing: Self 8/1/2007

Address: 5319 31st Road North Arlington VA 22207 Phone No. 703-538-7141

Regulation Title: USBC Part I Section No(s): 110.1

Proposed Change:

Permits for construction of single-family dwellings shall expire after 5 years. New ones for the same structure shall be limited to one year at a time, dependant upon a finding that the structure is 90% completed at the end of the initial five year period.

Supporting Statement:

We have been plagued by the construction of a "house" on our street for the last five years. So far the owners have dug a big hole, put in the cement footers and basement walls, but have NOT put in required substructures NOR basement floor. Over this they have constructed a steel cage, put plywood up and finished the roof. The house still has about 90% yet to be done. It is an eye-sore and a health hazard in the meantime. People cannot sell their houses.

Need for control by the STATE: County inspectors repeatedly allowed the family to ignore the 6th month rule. Allowed them to demolished the old house without a permit, and to start a new one without a permit. The new house is almost to the east lot line, which was allowed on their original variance. They were denied a new variance on July 13, 2005.

A new permit was issued on June 12, 2006, under the agreement work was to start immediately. No new work was done until April 2007. The house is still essentially only 10% completed.

One of owners works for the County.

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax. No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us		Document No. <u>C-110.7</u> Committee Action: _____ BHCD Action: _____
Submitted by: <u>Michael D. Redifer</u> Representing: _____		
Address: <u>2400 Washington Avenue Newport News, VA 23607</u>		Phone No.: <u>757-926-8861</u>
Regulation Title:	<u>Virginia Construction Code</u>	Section No(s): <u>110.7</u>
Proposed Change: 110.7 Revocation of permit. The building official may revoke a permit or approval issued under this code <u>for failure to meet conditions on which the permit or approval was based or in the case of any false statement, misrepresentation of fact or incorrect information supplied by the applicant in the application or construction documents on which the permit or approval was based.</u>		
Supporting Statement: Current language does not address other conditions which may affect the validity of the permit or approval. For example, Section 107.1.1 prohibits the issuance of a permit until designated fees have been paid or delayed payment is authorized. Failure to make an authorized delayed payment may constitute a misrepresentation of fact under 110.7 but a returned check does not fit any of the criteria for revocation as the section is currently worded.		

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-111.2**

Nature of Change: (text is on code change form)

To clarify the requirements for special inspections and reference new criteria contained in a companion change for Chapter 17.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

VBCOA's Administrative Provisions Committee worked with special inspection industry representatives and other client groups to facilitate this proposal, the final version of which was considered by Workgroup 2 and recommended to move forward as a consensus change.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

Address to submit to:

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Richmond, VA 23219-1321

Tel. No. (804) 371 - 7150
Fax No. (804) 371 - 7092
Email: bhcd@dhcd.state.va.us

6/11/07

Document No. C-111.2

Committee Action: _____

BHCD Action: _____

Submitted by: John Catlett Representing: VBCOA

Address: 401 Lafayette Street; Williamsburg VA 23185 Phone No.: (757) 220-6135

Regulation Title: Virginia New Construction Code Section No(s): 111.2 (Revised 1/2/07)

~~Proposed Change: 111.2 Special inspection requirements. Special inspections shall be conducted under the supervision of registered design professionals and in accordance with Section 1704. Persons engaged in the testing and inspection of construction materials, and the facilities, equipment and procedures they use in the process, shall comply or other standards acceptable to the building official. The building official may require written documentation of personnel certifications and laboratory accreditation, when appropriate, as evidence of conformance with this section.~~

Special inspections shall be conducted when required by Section 1704. Individuals and/or agencies conducting special inspections shall meet the qualification requirements of Section 1703 and 1704.1. The permit applicant shall submit a completed statement of special inspections with the permit application. The building official shall review, and if satisfied that the requirements have been met, approve the statement of special inspections as required in Sections 1704.1.1 and 1705 as a requisite to the issuance of a building permit. The building official may require interim inspection reports. The building official shall receive, and if satisfied that the requirements have been met, approve a final report of special inspections as specified in Section 1704.1.2. All fees and costs related to the special inspections shall be the responsibility of the building owner.

Supporting Statement: This is part one of a two part code change. The administrative language has been shortened to incorporate only those items not specifically addressed in Sections 1703 and 1704 regarding special inspection. Clarification as to the reporting requirements is provided.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-112.3.1**

Nature of Change: (text is on code change form)

To remove the reference to the manufacturer's installation instructions in the approval of equipment provision of the USBC.

Proponent: Virginia Chapter of the International Association of Electrical Inspectors (IAEI)

Staff Comments:

The existing provision addressing the manufacturer's installation instructions was added in the 2003 Code Change Cycle from a code change by the Virginia Plumbing and Mechanical Inspectors Association (VPMIA) and was based on a provision in the International Mechanical Code (IMC). It was added to the administrative provisions of the USBC as it was not clear whether the provision in the IMC could be used since it was administrative in nature. Prior to this provision, the USBC did not specifically address manufacturer's installation instructions or whether they could supersede the USBC if more restrictive.

This change is peripherally related to the set of code changes submitted for requiring Corrugated Stainless Steel Tubing (CSST) to be bonded to the building electrical system with a number six bonding jumper as the CSST manufacturers are now requiring this in their manufacturer's installation instructions, but the International Codes do not require it to be bonded in that fashion.

The code change was considered at the last Workgroup 2 meeting and there is no consensus among the client groups on exactly how to deal with manufacturer's installation instructions in the code.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM
(Use this form to submit changes to building and fire codes)

Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us	7/23/07	Document No. <u>C-112.3.1</u> Committee Action: _____ BHCD Action: _____				
<table style="width:100%;"> <tr> <td style="width:50%;">Submitted by: David G. Humphrey</td> <td style="width:50%;">Representing: Virginia Chapter I.A.E.I.</td> </tr> <tr> <td>Address: 1001 Cedar Crossing Terrace, Midlothian VA. 23114</td> <td>Phone No.: 804-501-4365</td> </tr> </table>			Submitted by: David G. Humphrey	Representing: Virginia Chapter I.A.E.I.	Address: 1001 Cedar Crossing Terrace, Midlothian VA. 23114	Phone No.: 804-501-4365
Submitted by: David G. Humphrey	Representing: Virginia Chapter I.A.E.I.					
Address: 1001 Cedar Crossing Terrace, Midlothian VA. 23114	Phone No.: 804-501-4365					
Regulation Title: Virginia Uniform Statewide Building Code Part I Section No(s): 112.3.1 & except.						
<p>Proposed Change: Conditions of listings. <u>Listed equipment shall be installed and used in accordance with any instructions included in the listing.</u> Where conflicts between this code and conditions of the listing of the equipment or appliance, or the manufacturer's installation instructions occur, the provisions of this code shall apply.</p> <p>Exception: Where a code provision is less restrictive than the conditions of the listing of the equipment or appliance, or the manufacturer's installation instructions, the conditions of the listing and the manufacturer's installation instructions shall apply.</p> <p>Supporting Statement: Instructions included in the listing or labeling of equipment or appliances have been evaluated for safe operation under the condition(s) specified in the listing by a nationally recognized testing laboratory. This information is performance based and necessary for safe operation of the equipment being installed.</p> <p>112.3.1 exception as currently written permits the manufacturer to supersede the requirements of the relevant adopted codes and standards in the form of installation instructions. Instructions included by the manufacturer may never have been substantiated by any testing, including testing by the manufacturer. These "instructions" that may be added by the sales department for a product, have the effect of forcing the Building Official and subsequently the Inspector, into a position of enforcing the marketing directives of manufacturers. If the manufacturer's instructions say to use only the manufacturer's brand light bulbs in that manufacturer's luminaire (lighting fixture), the inspector is obligated to reject the installation even if light bulbs of the same size and type of another brand are used. This is a simple, but accurate example of the problem with the current exception. A specific brand type would certainly be <i>more restrictive</i> as related to the use of the product. If on the other hand the manufacturer's brand is necessary for a safe installation that information will be included in the products listing requirements.</p> <p>The current language addressing a less or more restrictive code provision is unnecessary as all codes are minimum standards and the USBC generally would not consider exceeding the minimum requirements to be a violation of this code. If the manufacturer has information included in the "listing" of the product that requires more than the minimum permitted by the code we have no conflict as it is simply exceeding the minimum. We may also be assured that the Nationally Recognized Testing Laboratory which applied the listing mark performed testing that would take these increases of the minimum into consideration during the evaluation process of the product. The current requirement forces the Building Official into the position of determining if each instruction is <i>more or less restrictive</i> than the code and, if following the manufacturer's instructions would violate other portions of the same or any other relevant codes. We may very well have as many different opinions in this regard as we have AHJ's attempting to make this decision resulting in inconsistent code application across the Commonwealth.</p> <p>This proposed change has been in use in NFPA 70 (The National Electrical Code) for over 30 years and has worked superbly for electrical equipment of all descriptions. Adoption by the VUSBC will work equally well. Information necessary for a safe installation included in the "Listing" would still be required. Unsubstantiated information that may be designed for the purpose of limiting the manufacturer's legal liability or brand, sales and marketing interests of the products sales department would no longer be left to the inspections agency to police.</p>						



Virginia Chapter

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President, ABC-VA

14120 Parke Long Court, Suite 111, Chantilly, Virginia 20151
(703) 968-6205, Fax: (703) 968-6861, www.abcva.org

August 8, 2007

Mr. Vernon Hodge
Technical Services Manager
Department of Housing and Community Development
501 North Second Street
Richmond, Virginia 23219

Dear Mr. Hodge:

On behalf of the Associated Builders and Contractors – Virginia Chapter, Inc. (ABC-VA), I would like to express our organization's strong support of the attached two policy positions submitted by the International Association of Electrical Inspectors – Virginia Chapter relating to proposed changes to the Virginia Uniform Statewide Building Code.

Specifically, we concur with the IAEI – Virginia Chapter's proposed change to **13 VAC 5-63-120 Section 112.3.1** and fully support the elimination of the current exception which provides that where a code provision is less restrictive than the conditions of the listing of the equipment or appliance, or the manufacturer's installation instructions, the conditions of the listing and the manufacturer's installation instructions shall apply. ABC-VA supports the contention that in those instances wherein a conflict arises between the provisions of the USBC and conditions of the listing of the equipment or appliance, the provisions of the USBC should prevail. To do otherwise could undermine the overall integrity of the USBC, and thus negatively impact the capacity for uniform enforcement.

Additionally, ABC-VA concurs with the IAEI – Virginia Chapter's opposition to the proposed change to the Virginia Uniform Statewide Building Code Chapter 28 (2003 International Fuel Gas Code Sec. 309.1 and Sec. 310.1). The clear lack of any nationally recognized testing data supporting this proposed modification calls into question both its necessity and efficacy at this time.

Sincerely,

Harold B. Kelly
Vice President

Central Virginia Office, 1578-A East Parham Road, Richmond, Virginia 23228, (804) 346-4222, Fax: (804) 346-9111
Hampton Roads Office, 5505 Robin Hood Road, Suite D, Norfolk, Virginia 23513, (757) 855-8220, Fax: (757) 855-8225

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-113.3.6**

Nature of Change: (text is on code change form)

To include inspection of air-seal caulking and gasketing material in the required inspection for energy conservation material prior to concealment.

Proponent: Nelligan Insulation Company

Staff Comments:

While the current code already requires inspection of energy conservation materials prior to concealment, questions were raised during discussions at the work group meetings concerning how this requirement would be implemented and whether such materials are actually concealed in many cases. As a result of the discussions, this proposal did not receive consensus support in the workgroup process utilized in this code change cycle.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM
(Use this form to submit changes to building and fire codes)

Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7082 Email: bhcd@dhcd.state.va.us	Document No. <u>C-113.3.6</u> Committee Action: _____ BHCD Action: _____
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Submitted by: Robert Sullivan Representing: Nelligan Insulation, Inc.
 Address: 2539 Fairview Avenue, Lynchburg, VA 24501 Phone No.: (434) 847-4774 or (434) 546-3632 (Cell)
 Regulation Title: VIRGINIA CONSTRUCTION CODE (Part I) Section No(s): 113.3.6

Proposed Change: Insert [to include insulation as well as air-seal caulking and/or gasketing materials] so that 113.3.6 reads as follows:

"6. Inspection of energy conservation material, to include insulation as well as air-seal caulking and/or gasketing materials, prior to concealment."

Supporting Statement: Virginia will soon adopt the 2006 IECC which is greatly simplified when compared to the 2003 IECC and its predecessors. The 2006 IECC anticipates the fact that the vast majority of architects and builders rely upon "off-the-shelf" prescriptive measures e.g. fiberglass batting, blown or sprayed loose-fill, various foams etc. to comply with the building envelope performance requirements of the code.

It is well known that all installed building insulation materials perform better in conjunction with air-infiltration abatement materials. Studies have shown that approximately 25% of all infiltration occurs through the joint between the sole plate and the floor deck. The presence of simple bead of caulk at that joint may be verified visually concurrent with visual verification of installed wall insulation without added time, effort or manpower.

IECC Compliance Guide for Homes in Virginia (2006 IECC) includes Step-by-Step Instructions which reads:

- "2. Construct the building according to the envelope performance requirements and comply with certain other basic code requirements, which include:
- a. providing preventative maintenance manuals
 - b. attaching a permanent certificate listing insulation, window & HVAC performance information
 - c. installing temperature controls
 - d. limiting window and door leakage
 - e. caulking or sealing joints and penetrations
 - f. installing vapor retarders (in certain circumstances)
 - g. sealing and insulating ducts"

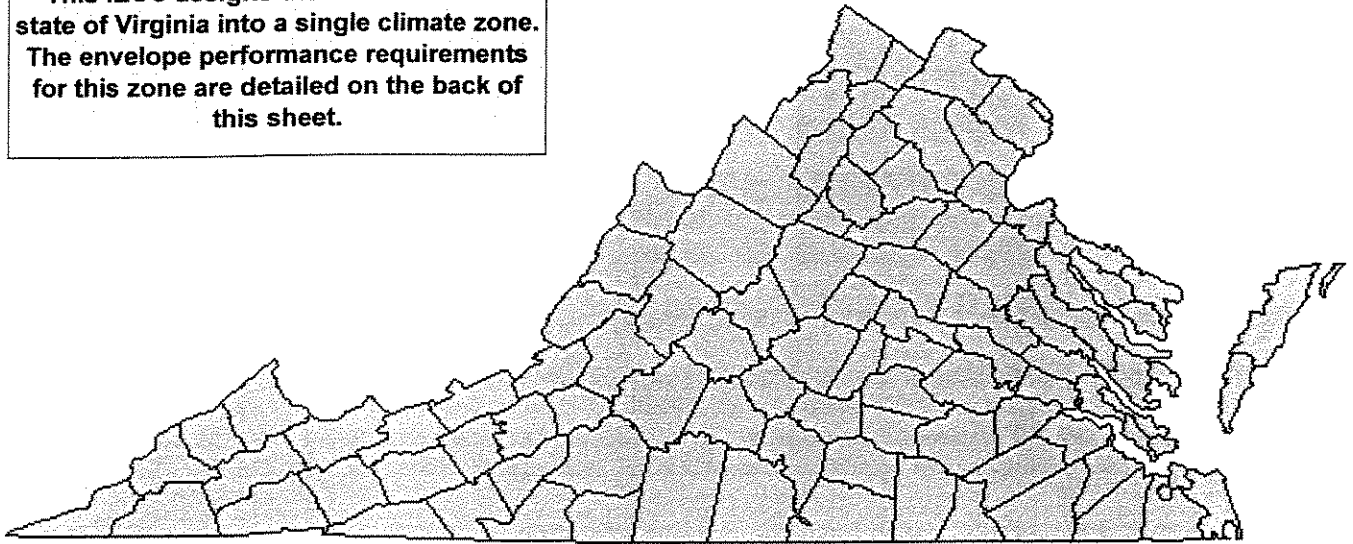
It is common practice for insulators to "chink" around window and door openings; however, it is not common practice for insulators to caulk and seal framing joints and penetrations unless requested to do so by builders and/or owners who recognize and desire the benefit of these measures.

Considering that rising energy costs is an on-going issue faced by all Virginians, and considering that the present code, as well as the soon to be adopted code, appears to require these measures, it seems appropriate to clarify the matter by inserting the proposed language to better ensure uniform enforcement among code jurisdictions.

IECC Compliance Guide for Homes in Virginia

Code: 2006 International Energy Conservation Code

This IECC assigns the counties in the state of Virginia into a single climate zone. The envelope performance requirements for this zone are detailed on the back of this sheet.



Step-by-Step Instructions

1. Refer to the "Table of IECC Building Envelope Requirements for Virginia" (on the back of this sheet) to determine the envelope performance requirements associated with the jurisdiction.
2. Construct the building according to the envelope performance requirements and comply with certain other basic code requirements, which include:
 - a. providing preventative maintenance manuals
 - b. attaching a permanent certificate listing insulation, window & HVAC performance information
 - c. installing temperature controls
 - d. limiting window and door leakage
 - e. caulking or sealing joints and penetrations
 - f. installing vapor retarders (in certain circumstances)
 - g. sealing and insulating ducts

The 2006 International Energy Conservation Code

The 2006 IECC was adopted during the 2005 International Code Council (ICC) code cycle and is currently available to states for adoption. It is published by the International Code Council. For additional details or to obtain a copy of the 2006 IECC, contact the ICC by phone or visit their website at www.iccsafe.org.

The IECC is the national model energy standard certified by the U.S. Department of Energy pursuant to the Energy Policy Act (EPAct). EPAct requires that all states review and consider adopting the IECC as the state building energy code.

Limitations

This guide is an energy code compliance aid for Virginia based upon the 2006 IECC. It does not provide a guarantee for meeting the IECC. The guide is not designed to reflect the actual energy code, if any, in Virginia and does not, therefore, provide a guarantee for meeting the state energy code. For details on Virginia's energy code, please contact your local building code official.

Table of IECC Building Envelope Requirements for Virginia

Prescriptive Path for Compliance with the 2006 IECC

WINDOWS AND INSULATION

FOUNDATION TYPE

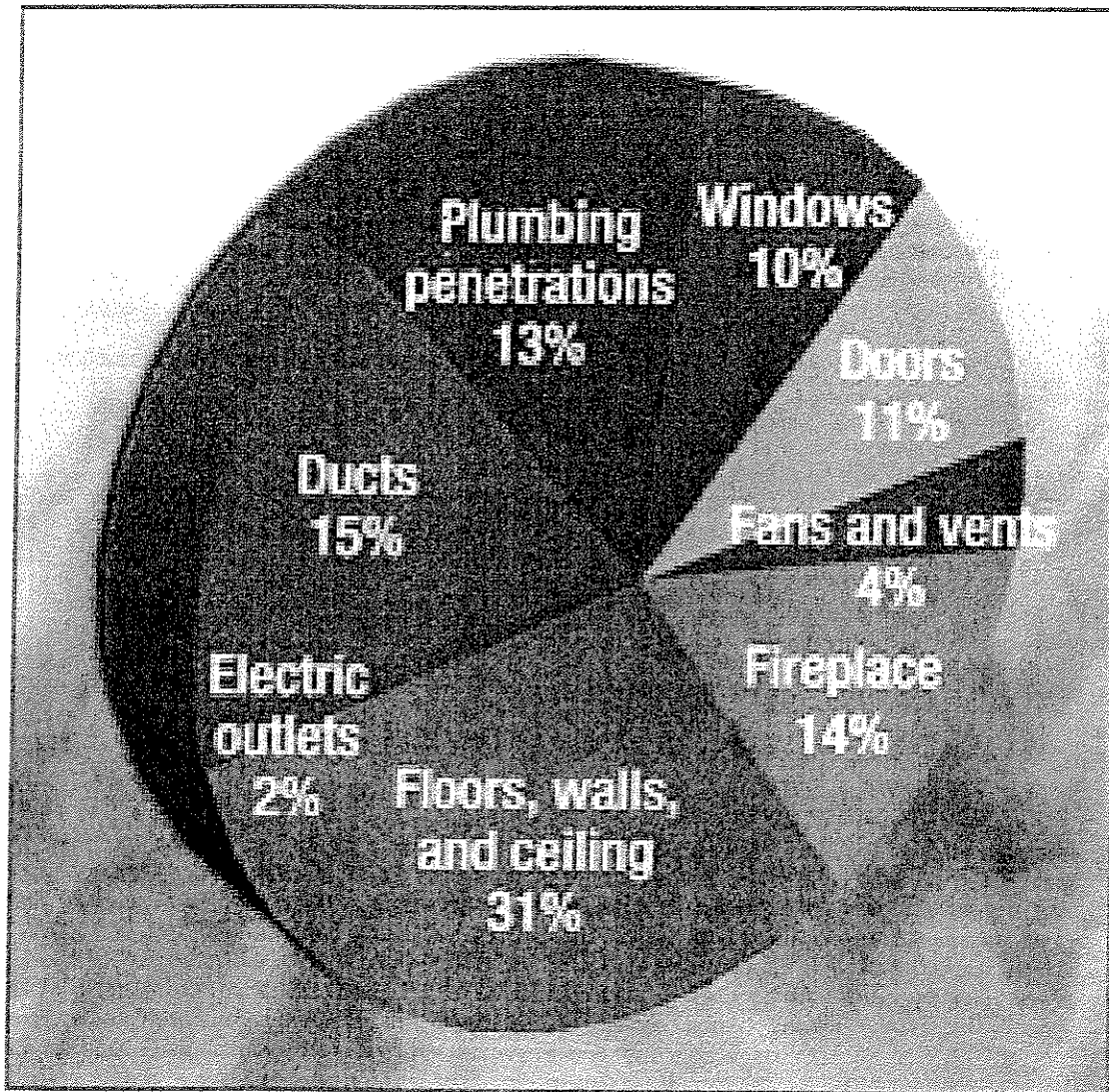
Package	Window U-factor	Skylight U-Factor	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement Wall R-Value	Slab R-Value and Depth	Crawl Space Wall R-Value
Climate Zone 4	0.40	0.60	R-38	R-13	R-5	R-19	R-10/13	R-10, 2 ft.	R-10/13

NOTES:

1. This table applies to new construction, as well as all additions, alterations and replacement windows and is based upon the envelope performance requirements for Climate Zone 4, Table 402.1.1 in the 2006 IECC, and does not reflect any state-specific amendments to the IECC. This table applies to residential buildings, as defined in the IECC, with wood framing and/or mass walls. For steel-framed buildings, refer to Section 402.2.4 of the IECC.
2. Window refers to any translucent or transparent material (i.e., glazing) in exterior openings of buildings, including skylights, sliding glass doors and glass block, along with the accompanying sashes, frames, etc.
3. Window and skylight U-factor values are maximum acceptable levels. An area-weighted average of fenestration products shall be permitted to satisfy the U-factor requirements. Window U-factor must be determined from a National Fenestration Rating Council (NFRC) label on the product or from a limited table of product default values in the IECC. Up to 15 square feet of glazed fenestration is permitted to be exempt from the U-factor requirement.
4. The code requires that windows be labeled in a manner to determine that they meet the IECC's air infiltration requirements; specifically, equal to or better than 0.30 cfm per square foot of window area (swinging doors below 0.50 cfm) as determined in accordance with NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory.
5. Opaque exterior doors must meet the window U-factor requirements. One exempt door is allowed.
6. Insulation R-values are minimum acceptable levels; R-19 shall be permitted to be compressed into a 2x6 cavity. R-values for walls represent the sum of cavity insulation plus insulated sheathing, if any.
7. If structural sheathing covers 25% or less of the exterior, insulated sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% of the exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.
8. Supply and return ducts shall be insulated to a minimum of R-8. Ducts in floor trusses shall be insulated to a minimum of R-6.
Exception: Ducts or portions thereof located completely inside the thermal building envelope.
9. Where there are two different values for basement and crawl space insulation requirements, the first R-value applies to continuous insulation, the second to framing cavity insulation. Crawl space wall R-value shall only apply to unventilated crawl spaces; R-5 shall be added to the required slab edge R-values for heated slabs; and floors over outside air must meet ceiling requirements.
10. Prescriptive packages are based upon normal HVAC equipment efficiencies (NAECA minimums). The code also requires the HVAC system to be properly sized using a computational procedure like the ASHRAE Handbook of Fundamentals.

US/DOE - Energy Efficiency & Renewable Energy

Sealing Air Leaks



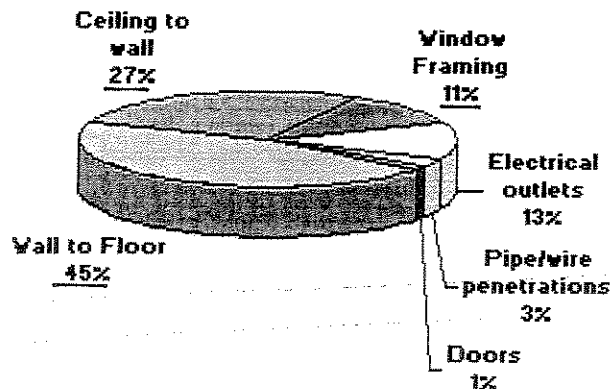
Where Does Air (and Energy) Leak?

Air infiltrates into & out of houses through every hole, nook & cranny. About one-third of air infiltration occurs through openings in ceilings, walls & floors. The most important steps toward residential energy conservation are 1) the installation of thermal insulation and 2) sealing against air infiltration.

Studies Show Wall Cavity Insulation Impacts Less Than 2% of Total Home Air Infiltration

It has been suggested that certain types of wall cavity insulation provide superior performance to the labeled R-value of the insulating product due to a reduction in air infiltration. Results of independent third party field testing¹ by several reputable organizations have shown that wall cavity insulation has a negligible effect on the air infiltration of the building and that less than 2% of the total house air infiltration could potentially be influenced with cavity insulation². These studies have shown that air infiltration through the walls of residential buildings is approximately 14%^{2,3} of the total infiltration in the average home. The largest component of air infiltration through walls is at ceiling and floor interfaces (72 to 83%)³. A much smaller percentage of the air infiltration occurs through the wall at penetrations (3%) and electrical boxes (13%) representing **only 1.4 to 1.6% of the total infiltration of the entire building**. The majority of these studies conclude that the type of insulation used in a wall cavity has very little impact on reducing air infiltration. Refer to Chart One (below) for more information regarding contributions of wall infiltration paths.

Chart One: Air Infiltration Paths for Unsealed Framed Wall Cavities³.



Furthermore, comparisons of air flow testing through fiber glass and cellulose demonstrate that neither material significantly resists air movement to the degree that it would be effective in reducing air infiltration or be considered an air barrier or vapor retarder⁴. Even though cellulose has a higher resistance to air flow than fiber glass, the small amount of air infiltration through the insulation is trivial with regard to the entire assembly. Differences with regard to air flow between the fibrous cavity materials are considered negligible and it can not be assumed that either product has a measurable advantage with regard to air infiltration. Also, houses insulated with low density polyurethane foam did not, on average, outperform fiber glass insulated houses.

¹ National Association of Home Builders "Field Demonstration of Alternative Wall Insulation Products." January 1998

² G.K. Yuill, Ph.D "A Field Study of the Effect of Insulation Types on the Air Tightness of Houses" January 1997

³ Colliver, D.G. Evaluation of the techniques for the measurement of air leakage of building components. Final report of ASHRAE Research Project RP 438, University of Kentucky, Lexington. See example on following page for more information.

⁴ National Research Council of Canada, Internal Report Internal Report IRC-IR-693 "Sound Transmission Through Gypsum Board Walls: Sound Transmission Results" October 1995

Controlling air infiltration in buildings is certainly an important consideration, as it has been shown to reduce energy consumption by as much as 35% while reducing the potential for moisture, dust, noise and pollution entry into the building. Good air infiltration control involves a properly balanced air distribution system and various measures to avoid gaps in the structure. As far as building materials, the studies referenced above demonstrate that the use of a correctly installed air barrier, caulks, and foams to reduce air infiltration has a much larger impact than the type of insulation used within the wall cavity (refer to Table One and Chart Two).

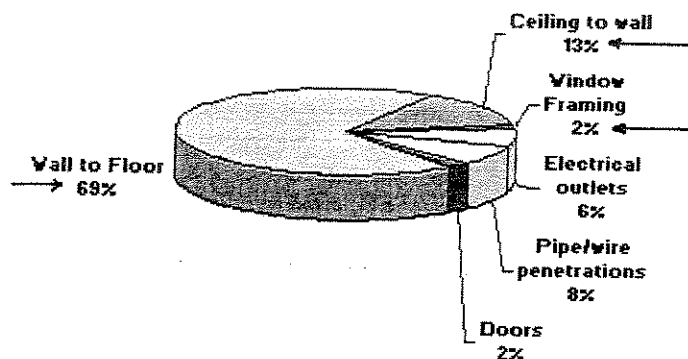
N. Douglass Fast, P.E
Technical Product Specialist
Building Insulation Division

Table One: Air Infiltration Example Based on ASHRAE Method for Estimating Air Infiltration⁵

Infiltration Path	Metric	Typical Values ⁵	Unsealed	Area (in ²)	% of Total	Sealed	Area (in ²)	% of Total
Wall to Bottom Plate	LFTC*	264 feet	0.2	52.80	45	.04	10.56	70
Ceiling to wall	LFTC*	264 feet	0.12	31.68	27	0.0075	1.98	13
Window framing	in. ² /ft ²	340 ft ²	0.039	13.26	11	.0007	0.24	2
Electrical outlets	in. ² /outlet	40 outlets	0.38	15.20	13	.023	0.92	6
Pipe/Plumbing/Wire penetrations	in. ² per penetrate	4 penetrate	0.9	3.60	3	0.3	1.20	8
Doors	in. ² /ft ²	3 @ 22.5 ft ²	0.024	1.62	1	.004	0.27	2
Diffusion					<1%			<1%
Totals				118.16	100		15.17	100

*LFTC – Lineal Foot of Total Crack

Chart Two: Air Infiltration Paths for Sealed Framed Wall Cavities



⁵ Based on 2 story National Association of Home Builders (NAHB) average house of 2272 ft², 8 ½ foot wall height, assumes 1 electrical outlet ever 6 lineal feet, 19 windows at 15% of total wall area and 3 exterior doors 3' wide.

Vernon Hodge

From: Emory Rodgers
Sent: Thursday, January 18, 2007 7:02 AM
To: Tomberlin, Guy; Vernon Hodge; Richard Bartell; Roger Robertson; JOHN CATLETT
Cc: Sandi Morris
Subject: RE: Bob Sullivan's Insulation Questions

Guy: Were the person to submit a code change expanding our minimum inspections, your point seem to oppose such a code change. Agree with you where problem lies when there is one. On Code Connection we always remain open to articles from our stakeholders but clearly understand such articles are not to be sale pitches for products. Since we have no such article on this issue, it is premature to conjecture if it would be accepted and included in the Spring edition. Thanks for your response and pointing out the complexity of such issues.

From: Tomberlin, Guy [mailto:Guy.Tomberlin@fairfaxcounty.gov]
Sent: Wednesday, January 17, 2007 7:56 AM
To: Emory Rodgers; Vernon Hodge; Richard Bartell; Roger Robertson; JOHN CATLETT
Cc: Sandi Morris
Subject: RE: Bob Sullivan's Insulation Questions

It is my opinion that these type intricate details pertaining to duct/insulation installations need not be included in the USBC. This is getting into micro management of how each jurisdiction inspects items required by the USBC. This could easily be heading for "leakage" test on duct work. I can write a book on the difficulties the code enforcement community would experience if duct leakage test were required. If a code change were approved on this level of detail then we will have every manufacture submitting proposals (basically their installation instructions) to reference to the details of their products. All the codes already cover this; they all say mgf installation instructions are enforceable. Look at fire caulking/stopping for example. This is defiantly a life safety issue yet according to industry more than 80% of failures are due to faulty installations. I could endorse more stringent code provisions for something like this way before we get down into the grass on duct sealing inspections. In my experience (more than 20 years) I have seen absolutely zero issues associated with duct sealing that have had a negative impact on the public safety and welfare of the citizens in VA. Please let me know if a code change gets submitted on this. I am sure our code committees will vehemently oppose this.

I am not sure this is a code connection item but it's not really my place to determine what makes it in that publication. However, if an article of this nature makes it in the code connection it seems only logical (fair) to start incorporating an "industry section" to allow all manufactures and vender s to promote their particular industries and products.

I believe I have talked to this gentleman and if he is the same person I believe he is; I found that his comments could easily be construed as more than offensive on how VA, as a whole, does their job performing inspections. Unfortunately during my conversation it was never clear to me that his negative comments on how poorly the VA code enforcement community performs their jobs was based on public safety or selling product.

Guy Tomberlin, CBO
 Land Development Services (LDS)
 12055 Government Center Parkway, Suite 630

1/18/2007

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-113.7**

Nature of Change: (text is on code change form)

To clarify the requirements for third party inspections and establish minimum criteria for third party inspection policies.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

VBCOA's Administrative Provisions Committee developed this proposal in cooperation with other VBCOA committees and building officials from various jurisdictions having well established third party inspection policies. The final version of the proposal was considered by Workgroup 2 and recommended to move forward as a consensus change.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us</p>	<p>6/11/07</p>	<p>Document No. <u>C-113.7</u></p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: <u>John Catlett</u> Representing: <u>VBCOA</u></p> <p>Address: <u>401 Lafayette Street; Williamsburg VA 23185</u> Phone No.: <u>(757) 220-6135</u></p> <p>Regulation Title: <u>Virginia New Construction Code</u> Section No(s): <u>113.7 (revised 12/14/06)</u></p>		
<p>Proposed Change:</p> <p>113.7 Approved inspection agencies. The building official may accept reports of inspections and tests from approved individuals or approved inspection agencies <u>approved in accordance with building official's written policy required by Section 113.7.1, which satisfy The individual or inspection agency must meet the qualifications and reliability requirements established by the written policy.</u> Under circumstances where the building official is unable to make the inspection or test <u>required by Sections 113.3 or 113.4</u> within two working days of a request or an agreed upon date, <u>or if authorized for other circumstances in the building official's written policy,</u> the building official shall accept reports for review. <u>The building official shall approve the report from such approved individuals or agencies unless there is cause to reject it. Failure to approve a report shall be in writing within two working days of receiving it stating the reason for the rejection.</u> Such Reports of inspections conducted <u>by approved third party inspectors or agencies</u> shall be in writing, <u>shall indicate if compliance with the applicable provisions of the USBC have been met</u> and shall be certified by the individual inspector or by the responsible officer when the report is from an agency.</p> <p>Note: Photographs, videotapes or other sources of pertinent data or information may be considered as constituting such reports and tests.</p> <p>113.7.1 Third-party inspectors. Each building official charged with the enforcement of the USBC shall have a written policy establishing the minimum acceptable qualifications for third-party inspectors. The policy shall include the format and time frame required for submission of reports, any prequalification or pre-approval requirements <u>before conducting a third party inspection;</u> and any other requirements and procedures established by the building official.</p> <p>113.7.2 Qualifications. <u>In determining third party inspector qualifications, the building official may consider such items as Virginia Department of Housing and Community Development inspector certification, other state or national certifications, state professional registrations, related experience, education, and any other factors which would demonstrate competency and reliability to conduct inspections.</u></p>		

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-116.3**

Nature of Change: (text is on code change form)

To clarify the existing provisions for revoking a certificate of occupancy and correlating it with actions taken under the Virginia Maintenance Code.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

Staff notes the reference to Section 118 of the Virginia Construction Code may cause confusion as that section only applies to buildings under construction that have not obtained a certificate of occupancy. In addition, the provision could be read to require any existing building to comply with the current code if a change of occupancy occurs without obtaining a permit. That could be construed as a punitive provision, as the current change of occupancy provision in the Virginia Construction Code only requires compliance with new requirements for structural strength, fire protection, means of egress, ventilation and sanitation. Other aspects of existing buildings do not have to be upgraded in a change of occupancy.

The code change was a result of discussions at VBCOA's Administrative Provisions and Property Maintenance Committees. Unfortunately, the change was not developed in time to be considered by the workgroups or to address concerns to the committees. It may be possible to make some minor changes to the language to alleviate the issues raised.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us</p>	<p align="center">7/30/07</p>	<p>Document No. <u>C-116.3</u></p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: <u>John Catlett</u> Representing: <u>VBCOA</u></p> <p>Address: <u>301 King Street, Alexandria Virginia 22314</u> Phone No.: <u>(703) 838-4360</u></p> <p>Regulation Title: <u>Virginia New Construction Code</u> Section No(s): <u>116.3</u></p>		
<p>Proposed Change:</p> <p>116.3 Suspension or revocation of certificate. A certificate of occupancy may be revoked or suspended whenever the building official discovers that such certificate was issued in error or on the basis of incorrect information or <u>when requested by the maintenance code official under Virginia Maintenance Code Section 105.7</u> or where there are repeated violations of the USBC that <u>are not in compliance with the certificate of occupancy or constitute an unsafe building or structure as established by the criteria found in Section 118.</u></p> <p><u>The certificate of occupancy shall be reinstated or reissued upon correction of the condition(s) cited by the maintenance code official or building official. The building or structure shall not be required to meet the requirements for a new building or structure unless the revocation was the result of a change of occupancy without a permit as required by Section 103.3. The revocation or suspension shall be in writing and shall state the requirements to reinstate or reissue the certificate of occupancy.</u></p>		
<p>Supporting Statement:</p> <p>The existing code language lacks detail and clarity as to when the certificate of occupancy can be revoked. The proposed language recognizes that the maintenance code official may request the building official to revoke the C of O for violations of the Virginia Maintenance Code. Clarification has also been provided when building conditions may drive the revocation or suspension of the occupancy permit.</p> <p>In addition, there has been misapplication of requirements to reinstate or reissue an occupancy permit. There are reported cases that buildings have been required to meet new construction requirements to obtain a reinstated or reissued occupancy permit when there has been no change of use or occupancy that caused the revocation. The proposed language will clarify that the minimum requirements to restore safe occupancy and the certificate.</p>		

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-302.1**

Nature of Change: (text is on code change form)

To add a new classification to the International Building Code (Group I-5) for ambulatory surgical centers and other health care facilities where patients would not be capable of exiting on their own during procedures.

Proponent: Fire Services Board Code Committee (FSBCC)

Staff Comments:

This change is similar to a proposal developed by a joint fire services code change committee at the national level for submittal to the International Building Code for the 2009 edition. It has not yet been considered through the International Code Council's code change process. This code change was also not submitted in time to be given consideration through the workgroup process.

Staff notes that the Group I-5 criteria contained in the change is for buildings which provide treatment for more than three persons on an outpatient basis that reduces the patient's ability of taking action for self-preservation without assistance from others. While the supporting statement for the change indicates that it only applies ambulatory surgical centers, the language may apply to doctors' offices and dental offices as well.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

Address to submit to:

DHCD, The Jackson Center
501 North Second Street
Richmond, VA 23219-1321

Tel. No. (804) 371 - 7150
Fax No. (804) 371 - 7092
Email: bhcd@dhcd.virginia.gov

8/9/07

Document No. C-302.1

Committee Action: _____

BHCD Action: _____

Submitted by: Robby Dawson - Chair

Representing: Fire Services Board Code Committee

Address: 1005 Technology Park Drive Glen Allen 23059

Phone No. 804-717-6838

Regulation Title: USBC and SFPC

Section No(s): Various - See below

Proposed Change:

Revise IBC Section 302.1 as follows:

302.1 General.

Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed below. A room or space that is intended to be occupied at different times for different purposes shall comply with all of the requirements that are applicable to each of the purposes for which the room or space will be occupied. Structures with multiple occupancies or uses shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.

1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4 and A-5
2. Business (see Section 304): Group B
3. Educational (see Section 305): Group E
4. Factory and Industrial (see Section 306): Groups F-1 and F-2
5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4 and H-5
6. Institutional (see Section 308): Groups I-1, I-2, I-3 and I-4 and I-5
7. Mercantile (see Section 309): Group M
8. Residential (see Section 310): Groups R-1, R-2, R-3 and R-4
9. Storage (see Section 311): Groups S-1 and S-2
10. Utility and Miscellaneous (see Section 312): Group U

Revise IBC Section 308.1 as follows:

308.1 Institutional Group I.

Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people are cared for or live in a supervised environment, having physical limitations because of health or age are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 ~~or~~ I-4 or I-5.

Revise IBC Section 308.6 as follows:

308.6 Group I-5. This occupancy includes buildings or structures, or portions thereof, used to provide treatment for more than three persons on an outpatient basis that reduces the patient's ability of taking action for self-preservation without assistance from others due to the actual treatment procedures or due to the use of general anesthesia.

Add new IBC Section 409 as follows:

SECTION 409

GROUP I-5

409.1 General. Occupancies in Group I-5 shall comply with the provisions of this section and other applicable provisions of this code.

409.2 Occupancy and tenant separation. I-5 occupancies shall be separated from other tenants and occupancies by fire partitions with at least a one-hour fire resistance rating. Doors in such partitions shall be solid bonded core wood of 1 3/4 inches or equivalent and are equipped with a positive latch and closing device. Vision panels, if provided in fire partitions or doors shall be fixed fire window assemblies in accordance with Table 715.5.

Exception: Mixed use occupancies that are separated occupancies are required to meet the requirements of Section 508.3.3.

409.3 Smoke barriers. Smoke barriers shall be provided to subdivide every story used by patients for sleeping or treatment and to divide other stories with an occupant load of 50 or more persons, into at least two smoke compartments.

Exceptions: 1. Facilities of less than 5000 ft² (465 m²) and protected by an approved automatic smoke detection system installed in accordance with Section 907.

2. Facilities of less than 10,000 ft² (930 m²) and protected throughout by an approved, supervised automatic sprinkler system installed in accordance with Section 903.3.

3. An area in an adjoining occupancy shall be permitted to serve as a smoke compartment for the ambulatory health care facility if the following criteria are met:

a. The separating wall and both compartments meet the requirements of Section 409.3.

b. The ambulatory health care facility is less than 22,500 ft² (2100 m²).

c. Access from the ambulatory health care facility to the other occupancy is unrestricted.

Such stories shall be divided into smoke compartments with an area of not more than 22,500 square feet (2092 m²) and the travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (61 m). The smoke barrier shall be in accordance with Section 709.

409.3.1 Refuge area. At least 15 net square feet (2.8 m²) per patient shall be provided within the aggregate area of corridors, patient rooms, treatment rooms, lounge or dining areas and other low-hazard areas on each side of each smoke barrier. On floors not housing patients confined to a bed or litter, at least 6 net square feet (0.56 m²) per occupant shall be provided on each side of each smoke barrier for the total number of occupants in adjoining smoke compartments.

409.3.2 Independent egress. A means of egress shall be provided from each smoke compartment created by smoke barriers without having to return through the smoke compartment from which means of egress originated.

Revise a row to IBC Table 503 as follows:

TABLE 503
ALLOWABLE HEIGHT AND AREAS^a
Height limitations shown as stories and feet above grade plane.
Area limitations as determined by the definition of "Area, building," per story

GROUP	HEIGHT (feet) HGT(S)	TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
		UL	160	65	55	65	55	65	50	40
I-5	$\frac{S}{A}$	$\frac{UL}{UL}$	$\frac{11}{UL}$	$\frac{5}{37,500}$	$\frac{4^e}{23,000}$	$\frac{5}{28,500}$	$\frac{4^e}{19,000}$	$\frac{5}{36,000}$	$\frac{3}{18,000}$	$\frac{2^e}{9,000}$

e. Type IIB, IIIB and VB shall not be permitted for I-5 occupancies located below the level of exit discharge. No I-5 occupancy shall be allowed more than one level below the level of exit discharge in construction Types IIIA, IV and VA.

Portions of table not shown do not change...

Revise IBC Section 508.3.2 as follows:

508.3.2 Nonseparated occupancies. Buildings or portions of buildings that comply with the provisions of this section shall qualify as nonseparated occupancies.

508.3.2.3 Separation. No separation is required between occupancies.

Exceptions: 1. Group H-2, H-3, H-4 or H-5 occupancies shall be separated from all other occupancies in accordance with Section 508.3.3.

2. Group I-5 occupancies shall meet the requirements of Section 409.2.

Revise IBC Table 508.3.3 as follows:

**TABLE 508.3.3
REQUIRED SEPARATION OF OCCUPANCIES (HOURS)**

Occupancy	Remainder unchanged
I ¹	

f. See Section 409.2 for Group I-5 occupancies.

Portions of table not shown do not change...

Revise IBC Section 708.1 as follows:

708.1 General.

The following wall assemblies shall comply with this section:

1. Walls separating dwelling units in the same building.
2. Walls separating sleeping units in occupancies in Group R-1 hotel, R-2 and I-1 occupancies.
3. Walls separating tenant spaces in covered mall buildings as required by Section 402.7.2.
4. Corridor walls as required by Section 1017.1.
5. Elevator lobby separation as required by Section 707.14.1.
6. Residential aircraft hangars.
7. Occupancy and tenant separation walls in Group I-5 occupancies as required by Section 409.2.

Revise IBC Table 803.5 as follows:

**TABLE 803.5
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY**

Group	Sprinklered			Unsprinklered		
	Exit enclosures and exit passageways	Corridors	Rooms and enclosed spaces	Exit enclosures and exit passageways	Corridors	Rooms and enclosed spaces
B, E, M, R-1, R-4, I-5	B	C	C	A	B	C

Revise IBC Section 804.4 as follows:

804.4 Interior floor finish requirements. In all occupancies, interior floor finish and floor covering materials in exit enclosures, exit passageways, corridors and rooms or spaces not separated from corridors by full-height partitions extending from the floor to the underside of the ceiling shall withstand a minimum critical radiant flux as specified in Section 804.4.1.

804.4.1 Minimum critical radiant flux. Interior floor finish and floor covering materials in exit enclosures, exit passageways and corridors shall not be less than Class I in Groups I-2 and I-3 and not less than Class II in

Groups A, B, E, H, I-4, I-5, M, R-1, R-2 and S. In all areas, floor covering materials shall comply with the DOC FF-1 "pill test" (CPSC 16 CFR, Part 1630).

Exception: Where a building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, Class II materials are permitted in any area where Class I materials are required, and materials complying with the DOC FF-1 "pill test" (CPSC 16 CFR, Part 1630) are permitted in any area where Class II materials are required.

Revise IBC Section 806 as follows:

[F] SECTION 806

DECORATIVE MATERIALS AND TRIM

[F] 806.1 General requirements.

In occupancies in Groups A, E, I and R-1 and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 806.2 or be noncombustible.

In Groups I-1, and I-2, and I-5, combustible decorative materials shall meet the flame propagation criteria of NFPA 701 unless the decorative materials, including, but not limited to, photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present. In Group I-3, combustible decorative materials are prohibited.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered interior finish if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered decorative materials or furnishings.

In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall meet the flame propagation performance criteria in accordance with Section 806.2 and NFPA 701 or shall be noncombustible.

Revise IBC Section 1014.2.3 as follows:

1014.2.3 Group I-5. Any room or suite of rooms of more than 2,500 square feet (232 m²) shall have at least two access doors remotely located from each other.

Revise IBC Table 1016.1 and IFC Table 1016.1 as follows:

TABLE 1016.1

EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY	WITHOUT SPRINKLER SYSTEM	WITH SPRINKLER SYSTEM ^e
I-2, I-3, I-4, <u>I-5</u>	150	200

c. The length of exit access travel between any occupiable room door and the exit shall not exceed 150 feet in I-5 occupancies.

Portions of table not shown do not change...

Revise IBC Table 1017.1 and IFC Table 1017.1 as follows:

TABLE 1017.1

CORRIDOR FIRE-RESISTANCE RATING

Occupancy	Occupant Load Served by Corridor	Required Fire-resistance rating	
		Without sprinkler system	With sprinkler system
I-2 ^a , I-4, <u>I-5</u>	All	NP	0

Portions of table not shown do not change...

Revise IBC Section 1017.3 as follows:

1017.3 Dead ends. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet (6096 mm) in length.

- Exceptions:** 1. In occupancies in Group I-3 of Occupancy Condition 2, 3 or 4 (see Section 308.4), the dead end in a corridor shall not exceed 50 feet (15 240 mm).
2. In occupancies in Groups B ~~and~~, F and I-5 where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the length of dead-end corridors shall not exceed 50 feet (15 240 mm).
3. A dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor.

Revise IFC Section 408.6 as follows:

IFC 408.6 Group I-2 and I-5 occupancies. Group I-2 and I-5 occupancies shall comply with the requirements of Sections 408.6.1 and 408.6.2 and Sections 401 through 406. Drills are not required to comply with the time requirements of Section 405.4.

Supporting Statement:

This proposal establishes a new Group I-5 occupancy for Ambulatory Surgical Care Facilities. Currently the IBC classifies these facilities as a Group B occupancy. These facilities typically include patients who are not capable of self-preservation in an emergency. These new provisions will provide a level of safety by bringing the ambulatory surgical centers to a higher level of protection, however not quite provide a level of safety equivalent to a Group I-2 occupancy. It is not sensible, to allow the patients to be in a position of unconsciousness, sometimes for hours, and not provide a higher level of protection.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-308.2**

Nature of Change: (text is on code change form)

To clarify that Group R-4 buildings under the International Building Code (IBC) must be sprinklered and to move the long-standing exception in the Virginia Construction Code for group homes to the appropriate section of the IBC.

Proponent: DHCD Staff

Staff Comments:

In discussions through the work group process used in this code change cycle, it was agreed that the IBC provisions for Group R-4, which are assisted living facilities housing more than five but not more than 16 occupants, should not be permitted to use the International Residential Code (IRC) exclusively for the construction of the facilities. It is unclear why this is permitted at the national level as all other Group R buildings must be sprinklered. Staff was asked to draft this compromise proposal that would require the buildings to be sprinklered, but permit the use of the IRC for all other aspects of construction.

The moving of the exception for licensed group homes being permitted to have up to eight occupants and use the IRC is just a correlation change due to the change in the Group I-1 classification at the national level in the IBC. Group I-1 facilities are now only facilities that house more than 16 occupants.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

Address to submit to: DHCD, The Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.virginia.gov		Document No. <u>C-308.2</u> Committee Action: _____ BHCD Action: _____
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Submitted by: Staff, Technical Assistance Services Office (TASO), DBFR, DHCD

Address: _____ Phone No. _____

Regulation Title: USBC, Virginia Construction Code Section No: IBC 308.2 and 310

Date Submitted: July 30, 2007

Proposed Change:

Delete the current exception to Section 308.2 of the IBC (the state amendment to the Group I-1 section) and move it to Section 310 under the Group R-4 category (as shown below).

Amend the Group R-4 category as shown below:

- R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code, or shall comply with the International Residential Code with the additional requirement to provide an automatic sprinkler system in accordance with Section 903.2.7.

Exception: Group homes licensed by the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services or the Virginia Department of Social Services that house no more than eight persons with one or more resident counselors shall be classified as Group R-2, R-3, R-4 or R-5. Not more than five of the persons may require physical assistance from staff to respond to an emergency situation.

Supporting Statement:

This change is necessary to correlate the IBC with the existing amendment for Group I-1 for licensed group homes. The Group R-4 category was not present when the exception first went into the USBC and the correlation was missed in the 2003 USBC. Group I-1 facilities are now only facilities which house more than 16 residents.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.1**

Nature of Change: (text is on code change form)

To establish the characteristics of small transient boarding facilities and bed and breakfast-type occupancies permitted to be classified as other than Group R-1.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal was developed cooperatively through the workgroup process involving bed and breakfast industry and hotel/motel/tourist industry representatives, building and fire official association representatives and other client groups. The final version of the proposal was considered by Workgroup 3 and recommended to move forward as a consensus change.

Staff notes that an editorial revision to the second exception suggested by staff was agreed to by the proponent and should be considered for the final language. That documentation is provided behind the code change.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us	<div style="font-size: 2em; font-family: cursive;">7/31/07</div>	Document No. <u>C-310.1</u> Committee Action: _____ BHCD Action: _____
Submitted by: VBCOA ad hoc Committee (Ron Clements drafted) Representing: VBCOA Address: PO Box 40 Lori Road Chesterfield Va, 23832 Phone No.: (804) 751-4163 Regulation Title: Virginia Construction Code (VUSBC)		
Proposed Change: 310.1 Residential group R. (no text change) R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including: Boarding houses Hotels (transient) Motels (transient) <u>Exceptions:</u> 1. <u>Non-proprietor occupied bed and breakfast and other transient boarding facilities not more than three stories above grade plane in height with a maximum of 10 occupants total are permitted to be classified as either group R-3 or R-5 provided that smoke alarms are installed in compliance with IBC Section 907.2.10.1.2 for group R-3 or IRC section 313.1 for group R-5.</u> 2. <u>Proprietor occupied bed and breakfast and other transient boarding facilities not more than three stories above grade plane in height, that are also occupied as the residence of the proprietor, with a maximum of 5 guest room sleeping units provided for the transient occupants are permitted to be classified as either group R-3 or R-5 provided that smoke alarms are installed in compliance with IBC Section 907.2.10.1.2 for group R-3 or IRC section 313.1 for group R-5.</u> <u>REMAINDER of the section is unchanged.</u>		

Supporting Statement: This is a change is similar in spirit and intent to one that was approved by the ICC General committee this 06/07 cycle (G49-06/07). These exception allows for conversion of small buildings and R-5 dwellings into "Bed and Breakfast" style inns with small occupant loads where just a few bedrooms are offered for boarders without requiring the buildings be brought into compliance as full R-1 facilities. The 10-occupant load was substantiated based on the use of that number for this purpose in a previous legacy code. Based on the use of this exemption in a previous legacy code and Virginia's previous use of up to 5 boarders not related to the residents that was the standard in BOCA to maintain an R-5 group designation we are convinced that this is a reasonable exception that maintains the needed level of safety at a reasonable cost. A similar exemption already exists in the 2006 code for group R-2 for congregate living facilities and a change was submitted and approved by committee (final vote pending) to the 2006 IBC to put this same exception into the 2007 supplement to the IBC. The 3 story height limitation was imposed to keep the exceptions aligned with the use of the IRC and below the mandatory sprinkler threshold of 4 stories for new R-5 construction. Though the exceptions are targeted at group R-5 occupancies the Group R-3 was added as an option for use in mixed occupancy situations.

The first exception is proposed for use for buildings that may only be occupied by transient guests where the proprietor of the establishment is located in a separate structure. Since the proprietor or staff is not available in the building to assist with evacuation the total occupant load was limited to 10 per the national code.

The second exception is proposed for use for buildings that the permanent occupant proprietor occupies the building with the transient occupants. In this case the added safety provided by the proprietors assistance with evacuation justifies a higher total occupant load and based on the industry standard five guest bedrooms was selected as the occupancy limitation for the exception.

Latest B & B change w/ 7/31 change

Hodge, Vernon

From: Clements, Ron [ClementsRo@chesterfield.gov]
Sent: Monday, August 06, 2007 8:35 AM
To: Hodge, Vernon; Eubank, Paula
Cc: Rodgers, Emory
Subject: RE: B & B change

Good catch, please make the change.

Ron

Ron Clements
Chief of Commercial Plan Review
Chesterfield County Virginia
Building Inspection Department
9800 Government Center Parkway, PO Box 40 Chesterfield, VA 23832-0040
Phone: (804) 751-4163
Fax: (804) 717-6080

-----Original Message-----

From: Hodge, Vernon [mailto:Vernon.Hodge@dhcd.virginia.gov]
Sent: Saturday, August 04, 2007 10:24 AM
To: Eubank, Paula
Cc: Rodgers, Emory; Clements, Ron
Subject: RE: B & B change

I would reword exception #2 as follows:

2. Bed and breakfasts and other transient boarding facilities not more than three stories above grade plane in height with a maximum of five guest rooms provided for the transient occupants and which are also used as the residence of the proprietor are permitted to be classified as either Group R-3 or R-5, provided the facility has smoke alarms in compliance with IBC Section 907.2.10.1.2 for Group R-3 or IRC Section 313.1 for Group R-5.

I deleted the term "sleeping units" as it is defined (in the 2006 IBC) to exclude rooms and spaces that are part of a dwelling unit and left just the term "guest room" which should be clear enough. That change should also be made to exception #1.

Vernon Hodge, Technical Services Manager
Technical Assistance Services Office (TASO)
Division of Building and Fire Regulations
Va. Department of Housing and Community Development
Direct Dial: (804) 371-7174
Email: Vernon.Hodge@DHCD.virginia.gov
Blackberry: (804) 382-2973

-----Original Message-----

From: Eubank, Paula
Sent: Wednesday, August 01, 2007 8:47 AM
To: Hodge, Vernon
Cc: Rodgers, Emory
Subject: FW: B & B change

Vernon, I thought this final revision was a bit wordy, particularly Exception 2, which I had to read several times to understand. Perhaps it could benefit from additional wordsmithing. Your thoughts?

Paula Neal Eubank
Associate Director of TASO

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R202)**

Nature of Change: (text is on code change form)

To change the definition of the term, “Story above grade,” in the International Residential Code to match the International Building Code and to eliminate confusion over its application.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal by the VBCOA IRC Committee makes it clear that if any of the criteria in the definition is met, then the lowest floor level of a dwelling would be considered a story and not a basement. The proposal is consistent with the historical application of the definition. VBOCA has also submitted this proposal for the 2009 IRC through the International Code Council’s code change process. The proposal was considered by Workgroup 1 and is recommended to move forward as a consensus proposal.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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<table style="width:100%"><tr><td style="width:30%">Submitted by:</td><td>Chuck Bajnai, Chesterfield County</td></tr><tr><td>Representing:</td><td>VBCOA - IRC Committee</td></tr><tr><td>Address:</td><td>9800 Government Parkway, Chesterfield, VA 23832</td></tr><tr><td>Phone No.:</td><td>(804) 717-6428</td></tr><tr><td>Regulation Title:</td><td>2006 IRC, Section 2: Definitions</td></tr></table> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: 200px;"><p>STORY ABOVE GRADE</p></div>			Submitted by:	Chuck Bajnai, Chesterfield County	Representing:	VBCOA - IRC Committee	Address:	9800 Government Parkway, Chesterfield, VA 23832	Phone No.:	(804) 717-6428	Regulation Title:	2006 IRC, Section 2: Definitions
Submitted by:	Chuck Bajnai, Chesterfield County											
Representing:	VBCOA - IRC Committee											
Address:	9800 Government Parkway, Chesterfield, VA 23832											
Phone No.:	(804) 717-6428											
Regulation Title:	2006 IRC, Section 2: Definitions											
<p>Proposed Change:</p> <p>Revise 2006 IRC, Section 2 Definitions, as follows:</p> <p>STORY ABOVE GRADE. Any story having its finished floor surface entirely above grade, except that a basement shall be considered as a story above grade where the finished surface of the floor above the basement is <u>meets any one of the following</u>:</p> <ol style="list-style-type: none">1. More <u>is more</u> than 6 feet (1829 mm) above the grade plane.2. More <u>is more</u> than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter.3. More <u>is more</u> than 12 feet (3658 mm) above the finished ground level at any point.												

Supporting Statement:

1. The 2003 and 2006 IRC definition of *story above grade* is very confusing when applied to basements. The current language and punctuation do not clearly indicate whether ALL of the requirements or ANY of the requirements is needed in order to satisfy the definition.
2. The 1995 CABO, Section 2, and the 1996 BOCA, Section 5.1 had identical definitions. Both documents defined *story above grade*:

STORY ABOVE GRADE. Any story having its finished floor surface entirely above grade, except that a *basement* shall be considered as a story above grade where the finished surface of the floor above the basement is:

1. More than 6 feet (1829 mm) above the grade plane;
2. More than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter; or
3. More than 12 feet (3658 mm) above the finished ground level at any point.

From the way this definition was written, the additional word "or" shows that the authors intended that any of the conditions would constitute a "story above grade".

3. The 2007 IRC Supplement corrects this problem by adding "any one of the following". The proposed code language copies the exact same definition as the 2007 IRC Supplement.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R301.2.1.1)-a**

Nature of Change: (text is on code change form)

To delete language from the 2006 International Residential Code (IRC) which requires design standards other than the IRC to be used when the basic wind speed equals or exceeds 100 miles per hour (mph) in hurricane-prone areas.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal by the VBCOA Region VIII is to keep the current language in the 2003 IRC for the 2006 IRC. The 2003 IRC only excluded the use of the IRC where the wind speeds equaled or exceeded 110 mph. This has been the standard for the residential code since its inception. The proposal was considered by Workgroup 1 and is recommended to move forward as a consensus proposal.

An identical change was submitted by the Virginia Department of Emergency Management (Code Change No. C-310.6(R301.2.1.1)-b) near the end of the cutoff period for proposals and is included behind this proposal.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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<p>Submitted by: <u>Lynn Underwood, CBO</u> Representing: <u>Region Eight VBCOA</u></p> <p>Address: <u>400 Granby, Norfolk, Va 23510</u> Phone No.: (757) 664-6511</p> <p>Regulation Title: <u>Design Criteria</u> Section No(s): <u>Section R301.2.1.1</u></p>		
<p>Proposed Change: R301.2.1.1 Design criteria. Construction in regions where the basic wind speeds from Figure R301.2(4) equal or exceed 100 miles per hour (45 m/s) in hurricane-prone regions, or 110 miles per hour (49m/s) elsewhere, shall be designed in accordance with one of the following:</p> <ol style="list-style-type: none"> 1. American Forest and Paper Association (AF&PA) <i>Wood Frame Construction Manual for One- and Two-Family Dwellings</i> (WFCM); or 2. <i>Southern Building Code Congress International Standard for Hurricane Resistant Residential Construction</i> (SSTD 10); or 3. <i>Minimum Design Loads for Buildings and Other Structures</i> (ASCE-7); or 4. American Iron and Steel Institute (AISI), <i>Standard for Cold-Formed Steel Framing—Prescriptive Method For One- and Two-Family Dwellings (COFS/PM) with Supplement to Standard for Cold-Formed Steel Framing—Prescriptive Method For One- and Two-Family Dwellings.</i> 5. Concrete construction shall be designed in accordance with the provisions of this code. 		
<p>Supporting Statement: This proposed change in the 2006 IRC would preserve consistency for one and two family dwelling construction in the 2000 and 2003 IRC in Coastal Virginia. Decreasing the threshold wind speed from 110 to 100 mph would force several jurisdictions to require a Registered Design Professional to design single family buildings. This action would be inconsistent with the Purpose and Scope: "... That buildings and structures should be permitted to be constructed at the least possible cost...".</p>		

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<p>Submitted by: <u>Deborah G. Mills, CFM</u> Representing: <u>VDEM</u></p> <p>Address: <u>Dept. Of Emergency Management, 10105 Trade Ct. Richmond VA 23236</u> Phone No.: <u>804-897-6500 ext. 6563</u></p> <p>Regulation Title: <u>Design Criteria</u> Section No(s): <u>Section R301.2.1.1</u></p>		
<p>Proposed Change:</p> <p>R301.2.1.1 Design criteria. Construction in regions where the basic wind speeds from Figure R301.2(4) equal or exceed 100 miles per hour (45 m/s) in hurricane-prone regions, or 110 miles per hour (49m/s) elsewhere, shall be designed in accordance with one of the following:</p> <ol style="list-style-type: none"> 1. American Forest and Paper Association (AF&PA) <i>Wood Frame Construction Manual for One- and Two-Family Dwellings</i> (WFCM); or 2. <i>Southern Building Code Congress International Standard for Hurricane Resistant Residential Construction</i> (SSTD 10); or 3. <i>Minimum Design Loads for Buildings and Other Structures</i> (ASCE-7); or 4. American Iron and Steel Institute (AISI), <i>Standard for Cold-Formed Steel Framing—Prescriptive Method For One- and Two-Family Dwellings (COFS/PM) with Supplement to Standard for Cold-Formed Steel Framing—Prescriptive Method For One- and Two-Family Dwellings</i>. 5. Concrete construction shall be designed in accordance with the provisions of this code. 		

Supporting Statement:

This proposed change in the 2006 IRC would preserve consistency single family and duplex (two-family) dwellings in the 2000 and 2003 IRC in Coastal Virginia. Decreasing the threshold wind speed from 110 to 100 mph will force several jurisdictions to require a Registered Design Professional to design single family buildings. This action would be inconsistent with the Purpose and Scope: "... That buildings and structures should be permitted to be constructed at the least possible cost..."

The national flood insurance regulations for construction in wind zone Special Flood Hazard Areas (SFHA) called Velocity Elevation (VE) zones are not specific as to wind hazard design method as long as a method specified by or consistent with the state or local building code is adhered to. VDEM would support any jurisdiction amending their local code to a higher standard should that be deemed appropriate due to local wind hazard conditions. It should be recognized that following Isabel (2003), the 2004 Florida Hurricanes and 2005's Katrina, Rita and Wilma, the insurance industry is increasingly requiring add-on wind policy coverage. Some insurers will only issue policy coverage for properties built to a higher standard. This trend may increase the cost of housing in wind hazard zones such as coastal Virginia in the future.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R301.5)**

Nature of Change: (text is on code change form)

To change the definition of “attic” in the International Residential Code (IRC) and to add a new term, “loft,” to essentially include what is now considered to be a finished attic.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal by the VBCOA IRC Committee addresses a problematic issue in the IRC that currently exists for attic construction. While the IRC now considers attics as only unfinished areas, many builders will use room trusses for future expansion in the attic design. Unfortunately, if a homeowner decides to finish the attic, an additional story is created and the IRC can no longer be used if the house is already three stories, since the IRC does not apply to four story houses. This proposal will permit such an arrangement provided the criteria for a loft is met. Staff notes that this proposal will essentially allow a four story house to be constructed under the IRC and may require a substantial reduction in the size of a finished attic in a one or two story house.

VBOCA has also submitted this proposal for the 2009 IRC through the International Code Council’s code change process. The proposal was not submitted in time to be considered by the workgroup process used in this code change cycle. Staff notes that a correlating proposal (C-310.6(R602.3)) has also been submitted addressing the minimum stud sizes. One option is for both proposals to be deferred for the 2009 Virginia Construction Code to permit them to be vetted at the national level to address potential concerns.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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Address to submit to: DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us	<div style="font-size: 2em; font-family: cursive;">8/8/07</div>	Document No. <u>C-310.6(R301.5)</u> Committee Action: _____ BHCD Action: _____		
<table style="width:100%;"> <tr> <td style="width:30%; vertical-align: top;"> Submitted by: Representing: Address: Phone No.: Regulation Title: </td> <td style="width:70%; vertical-align: top;"> Chuck Bajnai, Chesterfield County VBCOA - IRC Committee 9800 Government Parkway, Chesterfield, VA 23832 (804) 717-6428 2006 IRC <ul style="list-style-type: none"> Definitions, Chapter 2 Table 301.5 </td> </tr> </table> <div style="border: 1px solid black; width: fit-content; margin: 10px auto; padding: 5px 20px; text-align: center;">LOFT</div>			Submitted by: Representing: Address: Phone No.: Regulation Title:	Chuck Bajnai, Chesterfield County VBCOA - IRC Committee 9800 Government Parkway, Chesterfield, VA 23832 (804) 717-6428 2006 IRC <ul style="list-style-type: none"> Definitions, Chapter 2 Table 301.5
Submitted by: Representing: Address: Phone No.: Regulation Title:	Chuck Bajnai, Chesterfield County VBCOA - IRC Committee 9800 Government Parkway, Chesterfield, VA 23832 (804) 717-6428 2006 IRC <ul style="list-style-type: none"> Definitions, Chapter 2 Table 301.5 			

Proposed Change:

1. Change the definition of "attic"

The unfinished space between the ceiling ~~joists~~ assembly of the top story and the roof ~~rafters~~ assembly.

2. Add new definition to chapter 2:

LOFT. A finished or unfinished area, not considered a story, with an occupiable space complying with all of the following requirements:

- A. The occupiable floor area is at least 70 sqft, measured between areas that are at least 5 feet tall,
- B. The occupiable area has headroom of at least 7' clearance for at least 50% of the occupiable floor area,
- C. The occupiable floor width does not exceed 70% of the total width of the structure,
- D. The occupiable area is designed to comply with Table R301.5,
- E. The space has no exterior walls, and is enclosed by the roof assembly above, knee walls (if applicable) on the sides, and the floor-ceiling assembly below,

3. Change Table R301.5 as follows:

TABLE R301.5
MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS
(in pounds per square foot)

USE	LIVE LOAD
Attics with limited storage^{b g h}	20
<u>Attics without storage^b</u>	<u>10</u>
Attics without storage^b	40
<u>Attics with limited storage^{b g}</u>	<u>20</u>
<u>Lofts and attics with walk-up stairs</u>	<u>30</u>
Decks ^e	40
Exterior balconies	60
Fire escapes	40
Guardrails and handrails ^d	200
Guardrails in-fill components ^f	50
Passenger vehicle garages ^a	50
Rooms other than sleeping rooms	40
Sleeping rooms	30
Stairs	40c

4. Delete footnote h from Table R301.5.

~~h. Attic spaces served by a fixed stair shall be designed to support the minimum live load specified for sleeping rooms.~~

5. Change Section R313.2, item 3 as follows:

R313.2 Location. Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements but not including crawl spaces, and in lofts, but not in uninhabitable attics. In dwellings or dwelling units....

Supporting Statement:

1. Updating the definition of "attic".

This change is submitted to make the definition of "attic" more inclusive. Many attics are created by the space inside a roof truss. Trusses are made up of top and bottom chords and not roof rafters and ceiling joists. See attached picture.

2. Adding a new definition of "loft".

In general the IRC is tacit about how to handle walk-up attics, room trusses, or the infamous attic-finished-off-to-create-a-third-floor situation, sometimes called a "half story" or "finished attics" (an oxy-moron). In fact contractors frequently provide the gyp board and leave it laying on attic floor for the homeowner to finish off the space at a later time!

Historical perspective:

- The 1995 CABO provides no definition of "attic", and only refers to it in terms of the size of an access panel required.
- The 1996 BOCA define an "attic" as: "The space between the ceiling beams of the top story and the roof rafters".
- The 2000 IRC added the word "unfinished" to the definition in BOCA, and changed "beams" to "joists".

This proposal provides a new term, "loft", which defines "occupiable" space that may or may not be finished off, but has the potential of being finished off. "Occupiable" space has the same requirements as "habitable" space without using the term "habitable". This has been intentionally done because the space, in many cases, is "potentially" habitable when the homeowner finishes it off in the future.

"Loft" vs "attic":

- "Loft" may be finished off or has the potential of being finished off, an "attic" is always "unfinished" by definition.
- "Loft" is not a story, as currently in the code, an "attic" would become a story when finished off (and hence where the problem arises!).
- A "loft" has to have "occupiable" space that could be used as living space. an "attic" does not have to have any special size or space.
- "Loft" and "attic" are both intended to be the space between the ceiling assembly and the roof assembly.

3. In order to clarify the live load requirements for a "loft", Table R301.5 has been amended to show the minimum acceptable live load for a loft and attic with walk-up stairs is 30 psf. Trusses are typically designed within their software to be 40psf (see attached picture).

4. Changing Table R301.5 eliminates the need for footnote h.

5. R313, Smoke Alarm section is amended to incorporate "lofts" as one place where smoke detectors are required.

This change is necessary because homeowners, plan reviewers, contractors, and inspectors have been misapplying the definition of "attic" because there is no current word that defines a finished "attic". I contemplated just changing the meaning of "attic" by deleting the word "unfinished" from the definition, but the roots of the definition are too spread out throughout the code. This change gives everyone a word that fills in the language gap.

This change is submitted as a sister to the Stud Table, R602.3(5) change. These same changes are going to be submitted to ICC for the 2009, cycle II, IRC.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R301.7)**

Nature of Change: (text is on code change form)

To add a reference to the structural criteria for the support of masonry veneer in the building planning (Chapter 3) portion of the International Residential Code (IRC).

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal by the VBCOA IRC Committee and is essentially an editorial clarification to add the design criteria for the support of masonry veneer found in Chapter 7 to Chapter 3 where other design criteria is located. Staff only notes that the use of the term, "Veneer masonry walls," may cause confusion as it may misinterpreted that the L/600 deflection limit applies to the wood studs to which the masonry veneer is attached, however, it does not. The deflection limit only applies to wood or metal floor systems supporting the masonry veneer, which are not typical anyway, as most masonry veneer is supported off of a masonry or concrete foundation.

VBOCA has also submitted this proposal for the 2009 IRC through the International Code Council's code change process. The proposal was not submitted in time to be considered by the workgroup process used in this code change cycle.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

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<table><tr><td data-bbox="180 534 537 725"><p>Submitted by:</p><p>Representing:</p><p>Address:</p><p>Phone No.:</p><p>Regulation Title:</p></td><td data-bbox="537 534 1547 725"><p>Chuck Bajnai Chesterfield County VBCOA - IRC Committee 9800 Government Parkway, Chesterfield, VA 23832 (804) 717-6428 2006 IRC Table R301.7, Allowable Deflection of Structural Members</p></td></tr><tr><td colspan="2" data-bbox="180 725 1547 878"><div style="border: 1px solid black; padding: 5px; display: inline-block;">L/600</div></td></tr></table>			<p>Submitted by:</p> <p>Representing:</p> <p>Address:</p> <p>Phone No.:</p> <p>Regulation Title:</p>	<p>Chuck Bajnai Chesterfield County VBCOA - IRC Committee 9800 Government Parkway, Chesterfield, VA 23832 (804) 717-6428 2006 IRC Table R301.7, Allowable Deflection of Structural Members</p>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">L/600</div>	
<p>Submitted by:</p> <p>Representing:</p> <p>Address:</p> <p>Phone No.:</p> <p>Regulation Title:</p>	<p>Chuck Bajnai Chesterfield County VBCOA - IRC Committee 9800 Government Parkway, Chesterfield, VA 23832 (804) 717-6428 2006 IRC Table R301.7, Allowable Deflection of Structural Members</p>					
<div style="border: 1px solid black; padding: 5px; display: inline-block;">L/600</div>						

Proposed Change:

TABLE R301.7
ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS

STRUCTURAL MEMBER	ALLOWABLE DEFLECTION
Rafters having slopes greater than 3/12 with no finished ceiling attached to rafters	L/180
Interior walls and partitions	H /180
Floors and plastered ceilings	L/360
All other structural members	L/240
Exterior walls with plaster or stucco finish	H /360
Exterior walls wind loads with brittle finishes	L/240
Exterior walls wind loads with flexible finishes	L/120
<u>Veneer masonry walls</u>	<u>L/600</u>

Supporting Statement:

This change is intended to make the IRC clearer.

The allowable deflection specification for masonry veneer, L/600⁶, is from Section Chapter 703.7.2. This information should be added to this table because it is buried in Chapter 7 and frequently missed. This is the logical place to find it, and in this case, redundancy is a good thing.

This change will be submitted to ICC for the 2009, cycle 2 code proposals.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R302.1)**

Nature of Change: (text is on code change form)

To clarify the application of the fire separation distance to exterior walls of buildings constructed under the International Residential Code (IRC).

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal by the VBCOA IRC Committee is essentially editorial and clarifies how the IRC applies to exterior walls in different configurations relative to the line used to determine fire separation distance. While this proposal was not received in time to be vetted through the workgroup process, it has already been approved at the national level and is contained in the 2007 Supplement to the IRC, therefore staff included it with the consensus changes.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

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Submitted by: Richard E. Bartell Representing: VBCOA

Address: 7516 County Complex Rd. Hanover, Va. 23069 Phone No. (804)365-6039

Regulation Title: New Construction Code Section No(s): R 302.1 Exterior Walls

Proposed Change: Modify as follows:

R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1. ~~These provisions shall not apply to walls, projections, openings or penetrations in walls that are perpendicular to the line used to determine the fire separation distance. Projections beyond the exterior wall shall not extend more than 12 inches (305 mm) into the areas where openings are prohibited.~~

EXCEPTIONS;

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the fire separation distance.
2. Walls of dwellings and accessory structures located on the same lot.
renumber unchanged remainder

Supporting Statement:

This proposal provides greater clarity to the intent of this section, and, additionally is the same language VBCOA successfully submitted to the ICC and which will be included in the 2009 edition of the IRC.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R302.2)**

Nature of Change: (text is on code change form)

To add a requirement to the International Residential Code (IRC) and the International Building Code (IBC) for the protection of eaves and soffits.

Proponent: Fire Services Board Code Committee (FSBCC)

Staff Comments:

The current national codes do not require building elements associated with an exterior wall to be rated unless they are in close proximity to a property line. This change would apply to all eaves and soffits, regardless of the location of the exterior wall on the lot. This proposal would also essentially prevent the use of soffit vents, which are widely used in wood frame construction. The code change was not submitted in time to be given consideration through the workgroup process.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
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Richmond, VA 23219-1321

Tel. No. (804) 371 - 7150
Fax No. (804) 371 - 7092
Email: bhcd@dhcd.virginia.gov

Document No. C-310.6 (R302.2)

Committee Action: _____

BHCD Action: _____

8/9/07

Submitted by: Robby Dawson, Chair

Representing: Virginia Fire Services Board Code Committee

Address: 1005 Technology Park Drive Glen Allen 23059

Phone No.: 804-717-6838

Regulation Title: USBC

Section No(s): R302.2 and 1406.5

Proposed Change:

Add new text as follows:

USBC (IRC) R302.2 Protection of eaves. Eaves and soffits shall be protected on the exposed side by materials with an approved thermal barrier that will limit the spread of fire to the attic space using materials with a 15 minute fire resistant rating. Soffit vents shall not be located within 2 ft. horizontally of wall openings.

Add new text as follows:

USBC (IBC) 1406.5 Protection of eaves. Eaves and soffits shall be protected on the exposed side by materials with an approved thermal barrier that will limit the spread of fire to the attic space using materials with a 15 minute fire resistant rating. Soffit vents shall not be located within 2 ft. horizontally of wall openings.

Supporting Statement:

Independent test run on common soffit materials have shown failure in less than 10 seconds when exposed to an exterior fire. The intent of this provision is to retard the spread of fire into the attic space. It is well documented that fire readily enters into the attic space due to fire exiting exterior wall openings or fires originating on the exterior.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R307.1)**

Nature of Change: (text is on code change form)

To change the deflection limit in the International Residential Code (IRC) for exterior walls using a gypsum board interior finish to match the deflection limit for interior walls and partitions.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal by the VBCOA IRC Committee reflects standard construction practice and recognizes that wallboard applied to the interior side of an exterior wall contributes to the structural stability of the wall, thereby permitting same deflection limits as interior walls and partitions. While this proposal was not received in time to be vetted through the workgroup process, it has already been approved at the national level and is contained in the 2007 Supplement to the IRC, therefore staff included it with the consensus changes.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

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Submitted by: Richard E. Bartell Representing: VBCOA

Address: 7516 County Complex Rd. Hanover, Va. 23069 Phone No. (804)365-6039

Regulation New Construction Code Section No(s): Table R307.1

Proposed Change:
Revise Table R307.1 as follows:

**TABLE R301.7
ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS^{a,b,c,d}**

STRUCTURAL MEMBER	ALLOWABLE DEFLECTION
Rafters having slopes greater than 3/12 with no finished ceiling attached to rafters	L/180
Interior walls and partitions	H/180
Floors and plastered ceilings	L/360
All other structural members	L/240
Exterior walls with plaster or stucco finish	H/360
Exterior walls – wind loads ^a with brittle finishes	<u>H/240</u>
Exterior walls – wind loads ^a with flexible finishes	<u>H/120^d</u>

Note: L = span length, H = span height.

- The wind load shall be permitted to be taken as 0.7 times the Component and Cladding loads for the purpose of the determining deflection limits herein.
- For cantilever members, L shall be taken as twice the length of the cantilever.
- For aluminum structural members or panels used in roofs or walls of sunroom covers, not supporting edge of glass or sandwich panels, the total load deflection additions or patio shall not exceed L/60. For sandwich panels used in roofs or walls of sunroom additions or patio covers, the total load deflection shall not exceed L/120.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R317.1)**

Nature of Change: (text is on code change form)

To clarify the International Residential Code (IRC) provisions for duplex (two-family dwelling) construction when a lot line is separating the two dwelling units.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal by the VBCOA IRC Committee will require duplexes with a lot line between them to be constructed as townhouses. The proposal was considered by Workgroup 1 and alternatives were discussed to attempt to identify a compromise proposal where the current requirements for duplex construction could be increased somewhat without requiring duplexes with property lines to fully comply with the townhouse requirements. However, it was determined that duplexes are constructed in a variety of configurations and it was difficult to draft provisions to account for attic and crawlspace configurations where a common wall is not used, therefore, the workgroup members determined that linking the townhouse provisions in the case of a property line was the only practical solution. The workgroup recommended moving this change forward as a consensus change.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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Submitted by: <u>Michael Redifer</u>	Representing: <u>VBCOA IRC Committee</u>
Address: <u>2400 Washington Avenue Newport News, VA 23607</u>	Phone <u>(757) 926-8861</u> No.:
Regulation Title: <u>Virginia Construction Code</u>	Section No(s): <u>R317.1</u>

Proposed Change:

R317.1 Two-family dwellings. Dwelling units in two-family dwellings shall be separated from each other by wall and/or floor assemblies having not less than a 1-hour fire-resistance rating when tested in accordance with ASTM E 119. Fire-resistance-rated floor-ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend to and be tight against the underside of the roof sheathing. Dwelling unit separation wall assemblies, which are constructed on a lot line, shall be constructed as required in Section R317.2 for townhouses.

Exceptions:

1. A fire-resistance rating of ½ hour shall be permitted in buildings located entirely on the same lot and equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13.
2. For two-family dwellings located on the same lot, ~~W~~ wall assemblies need not extend through attic spaces when the ceiling is protected by not less than 5/8-inch (15.9 mm) Type X gypsum board and an attic draft stop constructed as specified in Section R502.12.1 is provided above and along the wall assembly separating the dwellings. The structural framing supporting the ceiling shall also be protected by not less than ½-inch (12.7 mm) gypsum board or equivalent.

Supporting Statement:

There has been some confusion regarding the required fire-resistance rating of separation walls of two-family dwellings when such walls are constructed on a lot line. The requirements for townhouse separation walls have not significantly changed from the CABO 1 & 2 Family Dwelling Code when by definition townhouses were separated by property lines. Construction of a 2-hour common interior wall which is continuous from foundation to parapet (or protected roof deck) is a reasonable alternative to providing 2 separate exterior walls. This change also serves to clarify that although the presence of a lot line does not increase the life-safety hazard associated with the occupancy of the building, there is a recognized need to provide an increase in property protection and does so by incorporating the crawl space (or basement) and parapet (or alternate adjacent roof deck) protection found in Section R317.2.2 and by reference R317.2.3 applicable to townhouse construction.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

USBC – Virginia Construction Code
Code Change Nos. C-310.6(R325.1)-a and C-310.6(R325.1)-b

Nature of Changes: (text is on code change form)

To add an alarm standard for residential swimming pools and a provision to permit lessening the protection requirements for fences and barriers around swimming pools depending on their location. Also to add more restrictive criteria for the fences and gates.

Proponent: Michael K. Lawson and John Whitney (Dewey Fencing)

Staff Comments:

Two changes for residential swimming pools were submitted. The first change (C-310.6(R325.1)-a) lists an ASTM standard for alarm systems for residential pools. Currently the International Residential Code (IRC) gives prescriptive requirements for an alarm system. The ASTM standard would include criteria for types of alarm systems not covered by the prescriptive requirements of the IRC. Staff notes that the ASTM standard has not been provided or reviewed for mandatory language, which is the standard used by the International Code Council for inclusion into the International Codes. The second part of the first change is to add a permissive provision to waive the barrier requirement in certain circumstances. Staff notes that both of these issues can currently be handled through the Virginia Construction Code's modification provisions. This first change was considered by Workgroup 1 and did not receive support.

The second change (C-310.6(R325.1)-b) is to reduce the size of the openings in the barrier around swimming pools and to require a child resistant latch with a key. The change was not received in time to be reviewed by the workgroups. Staff notes that the national provisions were established with the involvement of the Consumer Product Safety Commission and other pool safety advocacy groups.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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Submitted by: Michael K. Lawson, CGA, CET, CCI Address: 1139 North Boston Rd, Troy, VA 22974 Phone No.: 434 589 6437 Regulation Title: State Uniform Building Code Section No(s): Appendix G, Swimming Pools, etc	
Proposed Changes: (1) Add to Section AG107 Standards a reference to ASTM -F2208-2e (Swimming Pool Alarms). (2) Incorporate the use of pool alarms as a permitted methodology for residential swimming pool safety as an alternative in AG105.2 subparagraph 9. (3) Add language to section AG105.5 : "Localities are permitted to relax the code provisions of AG 105 when subject pool is not a visible 'attractive nuisance' from adjacent properties or in other circumstances when the literal application of the code would be excessively restrictive on subject property."	

Supporting Statement:

Natural features can protect as well as fence type barriers from" potential drowning and near-drowning by restricting access..."

This still requires a continuous barrier around the pool, spa or hot tub, but it allows the barrier to be something other than a man-made barrier described in Ag105.2.

Providing a man-made barrier in front of a natural barrier would constitute a "double barrier".

Since the code is tacit about this particular situation, this code change proposes to address the issue.

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CODE CHANGE FORM**

Address to submit to: DHCD, The Jackson Center 501 North Second Street Richmond, VA 23219-1321 Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.virginia.gov	8/8/07	Document No. <u>C-510.6 (R325.1)-b</u> Committee Action: _____ BHCD Action: _____
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Submitted by: John Whitney Representing: Dewey, llc. Dba Sam FencingAddress: 3518 Williamson Rd, Roanoke, VA.24012 Phone No. 540-561-0707Regulation Title: Swimming Pool, Spas and Hot Tubs Section No(s): AG105**Proposed Change:**

Section 6. Maximum mesh size for chain link fence of 2.25 inches, is too large. A small child can easily climb the fence by putting their feet into the mesh and pull up and over.

When using chain link fencing for pools, this company uses 1.25 inch mesh only. This material is readily available, child resistant and costs only \$1 more per ft.

Section 8. I do not feel that it is sufficient to state Self Latching device. This wording gives the fence installer the go ahead to fit almost any device available, which could well enable a child to easily open and gain access to the pool.

Child resistant latch with key is more specific and far safer. This company uses a product called Magna latch, with a magnetic safety gate latch. The latch release knob is 59 inches above finished ground level and key is easily removed for complete security.

Supporting Statement:

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R401.4)**

Nature of Change: (text is on code change form)

To match the language in the International Residential Code (IRC) to language used in the Virginia amendments to the IRC for expansive soil testing for foundation construction.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

During the 2003 code change cycle for the USBC, a consensus proposal was approved to delete the locality by locality expansive soil table which had been used for a number of years and which proved to be problematic and to substitute language closer to that in the IRC for determining when testing must be conducted for expansive soil. The VBCOA IRC Committee took the state language to the national level for the 2009 IRC and was successful in modifying much of the IRC provision to match the state language. This proposal is to match the state language to what will be in the 2009 IRC, so that the state amendment will be unnecessary when the 2009 USBC is adopted. While the proposal was not received in time to be vetted through the workgroup process, it has already been approved at the national level and is contained in the 2007 Supplement to the IRC, therefore staff included it with the consensus changes.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

**VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
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Submitted by: Richard E. Bartell Representing: VBCOA

Address: 7516 County Complex Rd. Hanover, Va. 23069 Phone No. (804)365-6039

Regulation New Construction Code Section No(s): R401.4

Proposed Change:

Revise as follows:

R401.4 Soil Tests. ~~In areas proven by~~ Where quantifiable data created by accepted soil science methodologies indicate to have expansive, compressible, shifting or other questionable soil characteristics are likely to be present, the building official shall determine whether to require a soil test to determine the soil's characteristics at a particular location. This test shall be made by an approved agency using an approved method.

Supporting Statement:

This proposed modification to section R401.4 provides clarity to when soils testing is required. Additionally this proposed language is the same as will be used in the 2009 edition of the IRC providing consistency between the USBC and the model code.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R403.1)**

Nature of Change: (text is on code change form)

To clarify the International Residential Code (IRC) provisions for small accessory buildings which are not required to have footings or foundations fully complying with the code.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal by the VBCOA IRC Committee is a minor clarification to correlate with other IRC provisions using height measuring criteria for determining the applicability of the code. Workgroup 1 recommended moving this change forward as a consensus change.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

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8/7/07

Document No. C-310.6/R403.1

Committee Action: _____

BHCD Action: _____

Submitted by:

Chuck Bajnai, Chesterfield County

Representing

VBCOA - IRC Committee

Address:

9800 Government Parkway, Chesterfield, VA 23832

Phone No.:

(804) 717-6428

Regulation Title:

USBC effective 11-16-2005, IRC Section R403.1: General, Exception #1

SHED EAVE HEIGHT

Proposed Change: USBC effective 11-16-2005, IRC Section R403.1, General, Exception #1

Revise 2003 USBC, Section R403.1, General, Exception 1 as follows:

"Exception: One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, not exceeding 256 square feet of building area, provided all of the following conditions are met:

1. The building eave height is ~~not more than 12~~ 10 feet or less.
2. ..."

Supporting Statement:

Two sections of the code deal with storage sheds:

- 2006 IRC, Section R403.1.4.1: says that storage sheds less than 600 sqft do not have to have frost-protected footings.
- 2003 VUSBC, Section R403.1: exempts storage sheds from the requirement for continuous solid footings, if it meets certain design parameters.

Here is the exact wording:

The 2006 IRC, Section 403.1.4.1,

"Exceptions:

1. Protection of freestanding accessory structures with an area of less than 600 sqft or less, of light-framed construction, with an eave height of 10 feet or less shall not be required.
2. Protection of freestanding accessory structures with an area of less than 400 sqft or less, of other than light-framed construction, with an eave height of 10 feet or less shall not be required.
3. ..."

The USBC effective 11-16-2005, IRC Section R403.1: General, Exception #1:

"Exception: One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, not exceeding 256 square feet of building area, provided all of the following conditions are met:

1. The building height is not more than 12,
2. ..."

Problem with the existing code language:

There appears to be two different ways of controlling accessory storage sheds in the code: one limits the eave height to 10 feet and the other limits the *ridge* height to 12 feet.

Discussion:

Currently a 16' x 16' storage shed (per the 256 sqft requirement) cannot exceed 12' height. With code-allowed side walls of 10 feet, the roof is limited to 3:12 slope.

If the language is modified so the USBC aligned with the IRC, then steeper roofs could be accommodated. In some cases with pre-manufactured storage buildings, this can be an issue.

Conclusion:

This change is intended to align the two ways of controlling storage sheds, namely limiting the eave height to 10 feet. The current IRC does not tell you from where the eave height is measured, and my proposal leaves it equally vague – BUT CONSISTENT.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

2006 Code Change Cycle – Code Change Evaluation Form

**USBC – Virginia Construction Code
Code Change No. C-310.6(R408.1)**

Nature of Change: (text is on code change form)

To retain the 2003 International Residential Code (IRC) provisions for crawlspace ventilation.

Proponent: Virginia Building and Code Officials Association (VBCOA)

Staff Comments:

This proposal by the VBCOA IRC Committee is in recognition that the 2006 IRC crawlspace ventilation requirements are somewhat extreme. While mechanically ventilated crawlspaces are becoming more prevalent, most homes utilizing crawlspaces are still using crawlspace vents to achieve compliance with the code and vapor retarders are typically always used. Retaining the 2003 IRC language will also increase energy conservation as fewer vents will be necessary. While this proposal was not received in time to be vetted through the workgroup process, since the proposal is to retain a current provision, staff included it with the consensus changes.

Codes and Standards Committee Action:

_____ Approve as presented.

_____ Disapprove.

_____ Approve as modified (specify):

_____ Carry over to next cycle.

_____ Other (specify):

PT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

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Submitted by: <u>Michael D. Redifer</u>		Representing: <u>VBCOA IRC Committee</u>	
Address: <u>2400 Washington Avenue Newport News, VA 23607</u>		Phone	<u>(757) 926-8861</u>
		No.:	
Regulation	<u>Virginia Construction Code</u>	Section No(s):	<u>R408.1 and R408.2</u>
Title:			
Proposed Change: R408.1 Ventilation. The under-floor space between the bottom of the floor joists and the earth under any building (except space occupied by a basement) shall have ventilation openings through foundation walls or exterior walls. The minimum net area of ventilation openings shall not be less than 1 square foot (0.0929 m ²) for each 150 square feet (14 m ²) of under-floor space area. One such ventilating opening shall be within 3 feet (914 mm) of each corner of the building. <u>Exception: When the exposed earth is covered with a continuous vapor retarder, the minimum net area of ventilation openings shall be not less than 1 square foot (0.0929 m²) for each 1500 square feet (139 m²) of under-floor space area. Joints of the vapor retarder shall overlap by 6 inches.</u> R408.2 Openings for under-floor ventilation. The minimum net area of ventilation openings shall not be less than 1 square foot (0.0929 m²) for each 150 square feet (14 m²) of under-floor space area. One ventilating opening shall be within 3 feet (914 mm) of each corner of the building. Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed ¼ inch (6.4 mm): (the remainder of R408.2 to remain unchanged)			
Supporting Statement: R408.1 During the 2003/04 code change cycle, sweeping changes were made by EC48. One of the changes was the elimination of a long-standing exception for providing natural crawl space ventilation by significantly reducing the number of foundation vents if a vapor retarder was provided. There was little or no substantiation given for the elimination of this provision which has been commonly used in Virginia for years without consequence. Without the exception, natural ventilation for a 1,500 square foot crawl space would require 20-25 vent openings of typical size. The only other alternative is by mechanical means. R408.2 This change is only to eliminate redundant and unnecessary language which is in R408.1.			